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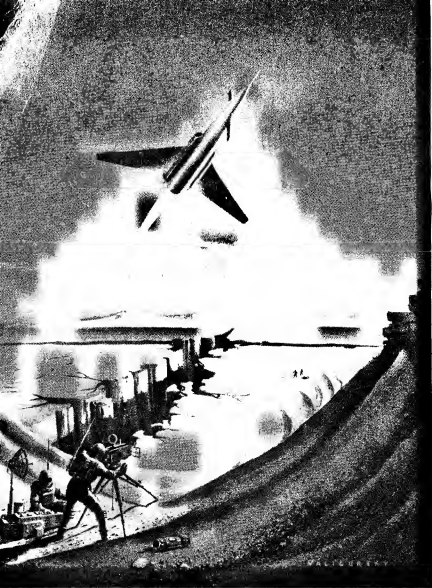
WORLDS of SCIENCE FICTION

MAY 1953 • 35 CENTS



A new novelette by the author of
THE EXPLORATION OF SPACE

Arthur C. Clarke



MARS LANDSCAPE—Mars would probably be disappointing from a scenic standpoint. Its eroded hills and ice caps would be the only relief in the monotonous horizon of barren wasteland. Perpetual dust storms, insufficient atmosphere, and blinding sun would inflict physical discomforts. Here, explorers study the terrain as their space ship makes aerial studies. The deep crevices that split the desert could be the "canals" that form geometric patterns in the astronomers telescope. On the horizon is one of the ice, or polar, caps.



WORLDS of SCIENCE FICTION

MARCH 1953

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Art Director: ED VALIGURSKY

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A CHAT WITH THE EDITOR

IN JANUARY 1952 a new science fiction magazine called *IF* was born and appeared quietly and unheralded on the newsstands. With this issue, that magazine is one year old. Actually, this is the first issue of the second year. Now, in the light of other magazines with tenures of 20 or 10 or even five years, a first birthday isn't particularly important. But it is somewhat significant in the case of *IF*, because it seems to indicate—after a year of slow, steady growth—that the infant is going to live.

During the past year we have worked hard to make each succeeding issue one of improvement. We have tried to secure better stories, better artwork, better editorial effort in producing a more interesting, more attractive science fiction magazine for your entertainment. And when we compare Volume 2, Number 1 with Volume 1, Number 1, we feel a certain amount of satis-

faction. Not that the ultimate has been achieved by a long, long shot. Not that this issue represents the best we can do. But because we have learned and progressed with each succeeding issue and feel that this issue is an improvement over the first six. And the fact that circulation has responded to such nourishment seems to indicate that *you*, too, think it is improving.

So this is *IF*'s first birthday, and don't think we haven't walked the floor at night with it, incurred some sweet headaches and magnificent hangovers. We've had some wonderful fun, too. Also—we've found that a lot of swell people were willing to help with the feeding, the burping and diaper changing. Artists and writers and agents have been cooperative and willing; the printers have been patient and understanding; the engravers always ready with a helping hand; the paper makers always prompt; some of the best circulation guys to ever handle a magazine have bent over backwards to put the baby out where you can see it; and you, sweet reader, have been indulgent and interested and willing enough to plunk down thirty-five cents in coin of the realm to take a look at the brat . . . All in all, a lot of nice people have had a hand in helping the infant *IF* learn to walk. Another year of this sort of attention and the kid'll be climbing fences!

INCIDENTALLY, one of the big stories in *IF*'s young life is appearing in the next issue. It's called *Jupiter Five* and was written by Arthur C. Clarke, Chairman of the British Interplanetary Society.

One of the world's authorities on the subject, Mr. Clarke has a smooth, friendly style of writing that lends to a space adventure the easy familiarity of a walk around the block. His *Exploration of Space* was a Book-of-the-Month Club selection last fall. Ken Fagg, cover artist for this issue, is (as this is written) reading the manuscript of *Jupiter Five* for a cover idea. Mr. Fagg, who recently caught the science fiction bug, is now a leading artist in other fields and it's a pretty safe bet he'll soon be among the top artists in science fiction.

NOT SO long ago I had my first opportunity to meet personally a large representation of the real fandom of science fiction—a bunch of guys and gals who got to Chicago via train, bus, plane, auto, boat and pogo-stick to attend the 10th World Science Fiction Convention. And I was really amazed to see the hundreds of young folks so keenly (and rabidly) interested in science fiction. I had the pleasant experience of talking with quite a few and I found each one eager, alert, and wise as to what was happening in the world of science fiction. Many of them could tell you what illustration appeared on what page of such and such magazine in an issue that must have been published while they were about the same age as IF. They knew the latest stories, and the authors, when and where they appeared, and would tell you, without mincing words, what they thought of them. At the auction, a lot of them hocked the family homestead to take home a cover painting, an interior illustration or

a manuscript. These young people (I'm not including the pros, the editors, agents, authors, etc.) came from all over the USA, and lots of them saved their own hard-earned cash for a year in order to make the trip. Unlike a business or political convention, they didn't stand to make money on this deal, they did it because they were crazy about science fiction.

One who seemed to me to typify the spirit of the convention is a gangling, blond, be-spectacled young man of nineteen named Jim Webbert. He is one of those who had been feeding the piggy bank for a year in order to make the trip—and believe me, brother, he wasn't going to miss a trick. He knew more about what was going on and where than the whole staff of house dicks; he was up and down the hotel more than the elevators, and he could tell practically anybody what kind of cigarette he smoked, whether he preferred tea to coffee, and what his particular niche in science fiction happened to be. Jim lives in Salt Lake City, Utah, is a senior in college, where he is majoring in chemical engineering, and during the summer he has been working as a meter reader to earn expenses. While in high school he started reading science fiction—which decided him on chemical engineering as a career. I don't think it requires much of a prophet to predict he'll go a long way.

So I'm glad I met these young people who represent science fiction fandom. I'm glad they live in America. I'm glad I'm working on a science fiction magazine. —jlq

DEADLY CITY

By Ivar Jorgenson

Illustrated by Ed Emsh



You're all alone in a deserted city. You walk down an empty street, yearning for the sight of one living face—one moving figure. Then you see a man on a corner and you know your terror has only begun.

HE AWOKE slowly, like a man plodding knee-deep through the thick stuff of nightmares. There was no definite line between the dream-state and wakefulness. Only a dawning knowledge that he was finally conscious and would have to do something about it.

He opened his eyes, but this made

no difference. The blackness remained. The pain in his head brightened and he reached up and found the big lump they'd evidently put on his head for good measure—a margin of safety.

They must have been prudent people, because the bang on the head had hardly been necessary.



The spiked drink which they had given him would have felled an ox. He remembered going down into the darkness after drinking it, and of knowing what it was. He remembered the helpless feeling.

It did not worry him now. He was a philosophical person, and the fact he was still alive cancelled out the drink and its result. He thought, with savor, of the chestnut-haired girl who had watched him take the drink. She had worn a very low bodice, and that was where his eyes had been at the last moment—on the beautiful, tanned breasts—until they'd wavered and puddled into a blur and then into nothing.

The chestnut-haired girl had been nice, but now she was gone and there were more pressing problems.

He sat up, his hands behind him at the ends of stiff arms clawing into long-undisturbed dust and filth. His movement stirred the dust and it rose into his nostrils.

He straightened and banged his head against a low ceiling. The pain made him sick for a minute and he sat down to regain his senses. He cursed the ceiling, as a matter of course, in an agonized whisper.

Ready to move again, he got onto his hands and knees and crawled cautiously forward, exploring as he went. His hand pushed through cobwebs and found a rough, cement wall. He went around and around. It was all cement—all solid.

Hell! They hadn't sealed him up in this place! There had been a way in so there had to be a way out. He went around again.

Then he tried the ceiling and found the opening—a wooden trap

covering a four-by-four hole—covering it snugly. He pushed the trap away and daylight streamed in. He raised himself up until he was eye-level with a discarded shaving cream jar lying on the bricks of an alley. He could read the trade mark on the jar, and the slogan: "For the Meticulous Man".

He pulled himself up into the alley. As a result of an orderly childhood, he replaced the wooden trap and kicked the shaving cream jar against a garbage can. He rubbed his chin and looked up and down the alley.

It was high noon. An uncovered sun blazed down to tell him this.

And there was no one in sight.

HE STARTED walking toward the nearer mouth of the alley. He had been in that hole a long time, he decided. This conviction came from his hunger and the heavy growth of beard he'd sprouted. Twenty-four hours—maybe longer. That mickey must have been a lulu.

He walked out into the cross street. It was empty. No people—no cars parked at the curbs—only a cat washing its dirty face on a tenement stoop across the street. He looked up at the tenement windows. They stared back. There was an empty, deserted look about them.

The cat flowed down the front steps of the tenement and away toward the rear and he was truly alone. He rubbed his harsh chin. Must be Sunday, he thought. Then he knew it could not be Sunday. He'd gone into the tavern on a Tuesday night. That would make it

five days. Too long.

He had been walking and now he was at an intersection where he could look up and down a new street. There were no cars—no people. Not even a cat.

A sign overhanging the sidewalk said: Restaurant. He went in under the sign and tried the door. It was locked. There were no lights inside. He turned away—grinning to reassure himself. Everything was all right. Just some kind of a holiday. In a big city like Chicago the people go away on hot summer holidays. They go to the beaches and the parks and sometimes you can't see a living soul on the streets. And of course you can't find any cars because the people use them to drive to the beaches and the parks and out into the country. He breathed a little easier and started walking again.

Sure—that was it. Now what the hell holiday was it? He tried to remember. He couldn't think of what holiday it could be. Maybe they'd dreamed up a new one. He grinned at that, but the grin was a little tight and he had to force it. He forced it carefully until his teeth showed white.

Pretty soon he would come to a section where everybody hadn't gone to the beaches and the parks and a restaurant would be open and he'd get a good meal.

A meal? He fumbled toward his pockets. He dug into them and found a handkerchief and a button from his cuff. He remembered that the button had hung loose so he'd pulled it off to keep from losing it. He hadn't lost the button, but everything else was gone. He

scowled. The least they could have done was to leave a man eating money.

He turned another corner—into another street—and it was like the one before. No cars—no people—not even any cats.

Panic welled up. He stopped and whirled around to look behind him. No one was there. He walked in a tight circle, looking in all directions. Windows stared back at him—eyes that didn't care where everybody had gone or when they would come back. The windows could wait. The windows were not hungry. Their heads didn't ache. They weren't scared.

He began walking and his path veered outward from the sidewalk until he was in the exact center of the silent street. He walked down the worn white line. When he got to the next corner he noticed that the traffic signals were not working. Black, empty eyes.

His pace quickened. He walked faster—ever faster until he was trotting on the brittle pavement, his sharp steps echoing against the buildings. Faster. Another corner. And he was running, filled with panic, down the empty street.

THE GIRL opened her eyes and stared at the ceiling. The ceiling was a blur but it began to clear as her mind cleared. The ceiling became a surface of dirty, cracked plaster and there was a feeling of dirt and squalor in her mind.

It was always like that at these times of awakening, but doubly bitter now, because she had never expected to awaken again. She

reached down and pulled the wadded sheet from beneath her legs and spread it over them. She looked at the bottle on the shabby bed-table. There were three sleeping pills left in it. The girl's eyes clouded with resentment. You'd think seven pills would have done it. She reached down and took the sheet in both hands and drew it taut over her stomach. This was a gesture of frustration. Seven hadn't been enough, and here she was again—awake in the world she'd wanted to leave. Awake with the necessary edge of determination gone.

She pulled the sheet into a wad and threw it at the wall. She got up and walked to the window and looked out. Bright daylight. She wondered how long she had slept. A long time, no doubt.

Her naked thigh pressed against the windowsill and her bare stomach touched the dirty pane. Naked in the window, but it didn't matter, because it gave onto an airshaft and other windows so caked with grime as to be of no value as windows.

But even aside from that, it didn't matter. It didn't matter in the least.

She went to the washstand, her bare feet making no sound on the worn rug. She turned on the faucets, but no water came. No water, and she had a terrible thirst. She went to the door and had thrown the bolt before she remembered again that she was naked. She turned back and saw the half-empty Pepsi-Cola bottle on the floor beside the bed table. Someone else had left it there—how many nights ago?—but she drank it anyhow, and even though

it was flat and warm it soothed her throat.

She bent over to pick up garments from the floor and dizziness came, forcing her to the edge of the bed. After a while it passed and she got her legs into one of the garments and pulled it on.

Taking cosmetics from her bag, she went again to the washstand and tried the taps. Still no water. She combed her hair, jerking the comb through the mats and gnarls with a satisfying viciousness. When the hair fell into its natural, blond curls, she applied powder and lipstick. She went back to the bed, picked up her brassiere and began putting it on as she walked to the cracked, full-length mirror in the closet door. With the brassiere in place, she stood looking at her slim image. She assayed herself with complete impersonality.

She shouldn't look as good as she did—not after the beating she'd taken. Not after the long nights and the days and the years, even though the years did not add up to very many.

I could be someone's wife, she thought, with wry humor. I could be sending kids to school and going out to argue with the grocer about the tomatoes being too soft. I don't look bad at all.

She raised her eyes until they were staring into their own images in the glass and she spoke aloud in a low, wondering voice. She said, "Who the hell am I, anyway? Who am I? A body named Linda—that's who I am. No—that's *what* I am. A body's not a *who*—it's a *what*. One hundred and fourteen pounds of well-built blond body called Lin-

da—model 1931—no fender dents—nice paint job. Come in and drive me away. Price tag—”

She bit into the lower lip she'd just finished reddenning and turned quickly to walk to the bed and wriggle into her dress—a gray and green cotton—the only one she had. She picked up her bag and went to the door. There she stopped to turn and thumb her nose at the three sleeping pills in the bottle before she went out and closed the door after herself.

The desk clerk was away from the cubbyhole from which he presided over the lobby, and there were no loungers to undress her as she walked toward the door.

Nor was there anyone out in the street. The girl looked north and south. No cars in sight either. No buses waddling up to the curb to spew out passengers.

The girl went five doors north and tried to enter a place called Tim's Hamburger House. As the lock held and the door refused to open, she saw that there were no lights on inside—no one behind the counter. The place was closed.

She walked on down the street followed only by the lonesome sound of her own clicking heels. All the stores were closed. All the lights were out.

All the people were gone.

HE WAS a huge man, and the place of concealment of the Chicago Avenue police station was very small—merely an indentation low in the cement wall behind two steam pipes. The big man had lain in this niche for forty-eight hours.

He had slugged a man over the turn of a card in a poolroom pinochle game, had been arrested in due course, and was awaiting the disposal of his case.

He was sorry he had slugged the man. He had not had any deep hatred for him, but rather a rage of the moment that demanded violence as its outlet. Although he did not consider it a matter of any great importance, he did not look forward to the six month's jail sentence he would doubtless be given.

His opportunity to hide in the niche had come as accidentally and as suddenly as his opportunity to slug his card partner. It had come after the prisoners had been advised of the crisis and were being herded into vans for transportation elsewhere. He had snatched the opportunity without giving any consideration whatever to the crisis. Probably because he did not have enough imagination to fear anything—however terrible—which might occur in the future. And because he treasured his freedom above all else. Freedom for today, tomorrow could take care of itself.

Now, after forty-eight hours, he writhed and twisted his huge body out of the niche and onto the floor of the furnace room. His legs were numb and he found that he could not stand. He managed to sit up and was able to bend his back enough so his great hands could reach his legs and begin to massage life back into them.

So elementally brutal was this man that he pounded his legs until they were black and blue, before feeling returned to them. In a few minutes he was walking out of the

furnace room through a jail house which should now be utterly deserted. But was it? He went slowly, gliding along close to the walls to reach the front door unchallenged.

He walked out into the street. It was daylight and the street was completely deserted. The man took a deep breath and grinned. "I'll be damned," he muttered. "I'll be double and triple damned. They're all gone. Every damn one of them run off like rats and I'm the only one left. I'll be damned!"

A tremendous sense of exultation seized him. He clenched his fists and laughed loud, his laugh echoing up the street. He was happier than he had ever been in his quick, violent life. And his joy was that of a child locked in a pantry with a huge chocolate cake.

He rubbed a hand across his mouth, looked up the street, began walking. "I wonder if they took all the whisky with them," he said. Then he grinned; he was sure they had not.

He began walking in long strides toward Clark Street. In toward the still heart of the empty city.

HE WAS a slim, pale-skinned little man, and very dangerous. He was also very clever. Eventually they would have found out, but he had been clever enough to deceive them and now they would never know. There was great wealth in his family, and with the rest of them occupied with leaving the city and taking what valuables they could on such short notice, he had been put in charge of one of the chauffeurs.

The chauffeur had been given the responsibility of getting the pale-skinned young man out of the city. But the young man had caused several delays until all the rest were gone. Then, meekly enough, he had accompanied the chauffeur to the garage. The chauffeur got behind the wheel of the last remaining car—a Cadillac sedan—and the young man had gotten into the rear seat.

But before the chauffeur could start the motor, the young man hit him on the head with a tire bar he had taken from a shelf as they had entered the garage.

The bar went deep into the chauffeur's skull with a solid sound, and thus the chauffeur found the death he was in the very act of fleeing.

The young man pulled the dead chauffeur from the car and laid him on the cement floor. He laid him down very carefully, so that he was in the exact center of a large square of outlined cement with his feet pointing straight north and his outstretched arms pointing south.

The young man placed the chauffeur's cap very carefully upon his chest, because neatness pleased him. Then he got into the car, started it, and headed east toward Lake Michigan and the downtown section.

After traveling three or four miles, he turned the car off the road and drove it into a telephone post. Then he walked until he came to some high weeds. He lay down in the weeds and waited.

He knew there would probably be a last vanguard of militia hunting for stragglers. If they saw a moving car they would investigate.

They would take him into custody and force him to leave the city.

This, he felt, they had no right to do. All his life he had been ordered about—told to do this and that and the other thing. Stupid orders from stupid people. Idiots who went so far as to claim the whole city would be destroyed, just to make people do as they said. God! The ends to which stupid people would go in order to assert their wills over brilliant people.

The young man lay in the weeds and dozed off, his mind occupied with the pleasant memory of the tire iron settling into the skull of the chauffeur.

After a while he awoke and heard the cars of the last vanguard passing down the road. They stopped, inspected the Cadillac and found it serviceable. They took it with them, but they did not search the weeds along the road.

When they had disappeared toward the west, the young man came back to the road and began walking east, in toward the city.

Complete destruction in two days?

Preposterous.

The young man smiled.

THE GIRL was afraid. For hours she had walked the streets of the empty city and the fear, strengthened by weariness, was now mounting toward terror. "One face," she whispered. "Just one person coming out of a house or walking across the street. That's all I ask. Somebody to tell me what this is all about. If I can find one person, I won't be afraid any more."

And the irony of it struck her. A few hours previously she had attempted suicide. Sick of herself and of all people, she had tried to end her own life. Therefore, by acknowledging death as the answer, she should now have no fear whatever of anything. Reconciled to crossing the bridge into death, no facet of life should have held terror for her.

But the empty city did hold terror. One face—one moving form was all she asked for.

Then, a second irony. When she saw the man at the corner of Washington and Wells, her terror increased. They saw each other at almost the same moment. Both stopped and stared. Fingers of panic ran up the girl's spine. The man raised a hand and the spell was broken. The girl turned and ran, and there was more terror in her than there had been before.

She knew how absurd this was, but still she ran blindly. What had she to fear? She knew all about men; all the things men could do they had already done to her. Murder was the ultimate, but she was fresh from a suicide attempt. Death should hold no terrors for her.

She thought of these things as the man's footsteps sounded behind her and she turned into a narrow alley seeking a hiding place. She found none and the man turned in after her.

She found a passageway, entered with the same blindness which had brought her into the alley. There was a steel door at the end and a brick lying by the sill. The door was locked. She picked up the brick and turned. The man skidded on

the filthy alley surface as he turned into the areaway.

The girl raised the brick over her head. "Keep away! Stay away from me!"

"Wait a minute! Take it easy. I'm not going to hurt you!"

"Get away!"

Her arm moved downward. The man rushed in and caught her wrist. The brick went over his shoulder and the nails of her other hand raked his face. He seized her without regard for niceties and they went to the ground. She fought with everything she had and he methodically neutralized all her weapons—her hands, her legs, her teeth—until she could not move.

"Leave me alone. Please!"

"What's wrong with you? I'm not going to hurt you. But I'm not going to let you hit me with a brick, either!"

"What do you want? Why did you chase me?"

"Look—I'm a peaceful guy, but I'm not going to let you get away. I spent all afternoon looking for somebody. I found you and you ran away. I came after you."

"I haven't done anything to you."

"That's silly talk. Come on—grow up! I said I'm not going to hurt you."

"Let me up."

"So you can run away again? Not for a while. I want to talk to you."

"I—I won't run. I was scared. I don't know why. You're hurting me."

He got up—gingerly—and lifted her to her feet. He smiled, still holding both her hands. "I'm sorry. I guess it's natural for you to be

scared. My name's Frank Brooks. I just want to find out what the hell happened to this town."

He let her withdraw her hands, but he still blocked her escape. She moved a pace backward and straightened her clothing. "I don't know what happened. I was looking for someone too."

He smiled again. "And then you ran."

"I don't know why. I guess—"

"What's your name?"

"Nora—Nora Spade."

"You slept through it too?"

"Yes . . . yes. I slept through it and came out and they were all gone."

"Let's get out of this alley." He preceded her out, but he waited for her when there was room for them to walk side by side, and she did not try to run away. That phase was evidently over.

"I got slipped a mickey in a tavern," Frank Brooks said. "Then they slugged me and put me in a hole."

His eyes questioned. She felt their demand and said, "I was—asleep in my hotel room."

"They overlooked you?"

"I guess so."

"Then you don't know anything about it?"

"Nothing. Something terrible must have happened."

"Let's go down this way," Frank said, and they moved toward Madison Street. He had taken her arm and she did not pull away. Rather, she walked invitingly close to him.

She said, "It's so spooky. So . . . empty. I guess that's what scared me."

"It would scare anybody. There

must have been an evacuation of some kind."

"Maybe the Russians are going to drop a bomb."

Frank shook his head. "That wouldn't explain it. I mean, the Russians wouldn't let us know ahead of time. Besides, the army would be here. Everybody wouldn't be gone."

"There's been a lot of talk about germ warfare. Do you suppose the water, maybe, has been poisoned?"

He shook his head. "The same thing holds true. Even if they moved the people out, the army would be here."

"I don't know. It just doesn't make sense."

"It happened, so it has to make sense. It was something that came up all of a sudden. They didn't have much more than twenty-four hours." He stopped suddenly and looked at her. "We've got to get out of here!"

Nora Spade smiled for the first time, but without humor. "How? I haven't seen one car. The buses aren't running."

His mind was elsewhere. They had started walking again. "Funny I didn't think of that before."

"Think of what?"

"That anybody left in this town is a dead pigeon. The only reason they'd clear out a city would be to get away from certain death. That would mean death is here for anybody that stays. Funny. I was so busy looking for somebody to talk to that I never thought of that."

"I did."

"Is that what you were scared of?"

"Not particularly. I'm not afraid

to die. It was something else that scared me. The aloneness, I guess."

"We'd better start walking west—out of the city. Maybe we'll find a car or something."

"I don't think we'll find any cars."

He drew her to a halt and looked into her face. "You aren't afraid at all, are you?"

She thought for a moment. "No, I guess I'm not. Not of dying, that is. Dying is a normal thing. But I was afraid of the empty streets—nobody around. That was weird."

"It isn't weird now?"

"Not—not as much."

"I wonder how much time we've got?"

Nora shrugged. "I don't know, but I'm hungry."

"We can fix that. I broke into a restaurant a few blocks back and got myself a sandwich. I think there's still food around. They couldn't take it all with them."

They were on Madison Street and they turned east on the south side of the street. Nora said, "I wonder if there are any other people still here—like us?"

"I think there must be. Not very many, but a few. They would have had to clean four million people out overnight. It stands to reason they must have missed a few. Did you ever try to empty a sack of sugar? Really empty it? It's impossible. Some of the grains always stick to the sack."

A few minutes later the wisdom of this observation was proven when they came to a restaurant with the front window broken out and saw a man and a woman sitting at one of the tables.

HE WAS a huge man with a shock of black hair and a mouth slightly open showing a set of incredibly white teeth. He waved an arm and shouted, "Come on in! Come on in for crissake and sit down! We got beer and roast beef and the beer's still cold. Come on in and meet Minna."

This was different, Nora thought. Not eerie. Not weird, like seeing a man standing on a deserted street corner with no one else around. This seemed normal, natural, and even the smashed window didn't detract too much from the naturalness.

They went inside. There were chairs at the table and they sat down. The big man did not get up. He waved a hand toward his companion and said, "This is Minna. Ain't she something? I found her sitting at an empty bar scared to death. We came to an understanding and I brought her along." He grinned at the woman and winked. "We came to a real understanding, didn't we, Minna?"

Minna was a completely colorless woman of perhaps thirty-five. Her skin was smooth and pale and she wore no makeup of any kind. Her hair was drawn straight back into a bun. The hair had no predominating color. It was somewhere between light brown and blond.

She smiled a little sadly, but the laugh did not cover her worn, tired look. It seemed more like a gesture of obedience than anything else. "Yes. We came to an understanding."

"I'm Jim Wilson," the big man boomed. "I was in the Chicago Avenue jug for slugging a guy in a

card game. They kind of overlooked me when they cleaned the joint out." He winked again. "I kind of helped them overlook me. Then I found Minna." There was tremendous relish in his words.

Frank started introductions which Nora Spade cut in on. "Maybe you know what happened?" she asked.

Wilson shook his head. "I was in the jug and they didn't tell us. They just started cleaning out the joint. There was talk in the bullpen—invasion or something. Nobody knew for sure. Have some beer and meat."

Nora turned to the quiet Minna. "Did you hear anything?"

"Naw," Wilson said with a kind of affectionate contempt. "She don't know anything about it. She lived in some attic dump and was down with a sore throat. She took some pills or something and when she woke up they were gone."

"I went to work and—" Minna began, but Wilson cut her off.

"She swabs out some joints on Chicago Avenue for a living and that was how she happened to be sitting in that tavern. It's payday, and Minna was waiting for her dough!" He exploded into laughter and slapped the table with a huge hand. "Can you beat that? Waiting for her pay at a time like this."

Frank Brooks set down his beer bottle. The beer was cold and it tasted good. "Have you met anybody else? There must be some other people around."

"Uh-uh. Haven't met anybody but Minna." He turned his eyes on the woman again, then got to his feet. "Come on, Minna. You and

I got to have a little conference. We got things to talk about." Grinning, he walked toward the rear of the restaurant. Minna got up more slowly. She followed him behind the counter and into the rear of the place.

Alone with Nora, Frank said, "You aren't eating. Want me to look for something else?"

"No—I'm not very hungry. I was just wondering—"

"Wondering about what?"

"When it will happen. When whatever is going to happen—you know what I mean."

"I'd rather know *what's* going to happen. I hate puzzles. It's hell to have to get killed and not know what killed you."

"We aren't being very sensible, are we?"

"How do you mean?"

"We should at least act normal."

"I don't get it."

Nora frowned in slight annoyance. "Normal people would be trying to reach safety. They wouldn't be sitting in a restaurant drinking beer. We should be trying to get away. Even if it does mean walking. Normal people would be trying to get away."

Frank stared at his bottle for a moment. "We should be scared stiff, shouldn't we?"

It was Nora's turn to ponder. "I'm not sure. Maybe not. I know I'm not fighting anything inside—fear, I mean. I just don't seem to care one way or another."

"I care," Frank replied. "I care. I don't want to die. But we're faced with a situation, and either way it's a gamble. We might be dead before I finish this bottle of beer. If that's

true, why not sit here and be comfortable? Or we might have time to walk far enough to get out of range of whatever it is that chased everybody."

"Which way do you think it is?"

"I don't think we have time to get out of town. They cleaned it out too fast. We'd need at least four or five hours to get away. If we had that much time the army, or whoever did it, would still be around."

"Maybe they didn't know themselves when it's going to happen."

He made an impatient gesture. "What difference does it make? We're in a situation we didn't ask to get in. Our luck put us here and I'm damned if I'm going to kick a hole in the ceiling and yell for help."

Nora was going to reply, but at that moment Jim Wilson came striding out front. He wore his big grin and he carried another half-dozen bottles of beer. "Minna'll be out in a minute," he said. "Women are always slower than hell."

He dropped into a chair and snapped the cap off a beer bottle with his thumb. He held the bottle up and squinted through it, sighing gustily. "Man! I ain't never had it so good." He tilted the bottle in salute, and drank.

THE SUN was lowering in the west now, and when Minna reappeared it seemed that she materialized from the shadows, so quietly did she move. Jim Wilson opened another bottle and put it before her. "Here—have a drink, baby."

Obediently, she tilted the bottle and drank.

"What do you plan to do?" Frank asked.

"It'll be dark soon," Wilson said. "We ought to go out and try to scrounge some flashlights. I bet the power plants are dead. Probably aren't any flashlights either."

"Are you going to stay here?" Nora asked. "Here in the Loop?"

He seemed surprised. "Why not? A man'd be a fool to walk out on all this. All he wants to eat and drink. No goddam cops around. The life of Reilly and I should walk out?"

"Aren't you afraid of what's going to happen?"

"I don't give a good goddam what's going to happen. What the hell! Something's always going to happen."

"They didn't evacuate the city for nothing," Frank said.

"You mean we can all get killed?" Jim Wilson laughed. "Sure we can. We could have got killed last week too. We could of got batted in the can by a truck anytime we crossed the street." He emptied his bottle, threw it accurately at a mirror over the cash register. The crash was thunderous. "Trouble with you people, you're worry warts," he said with an expansive grin. "Let's go get us some flashlights so we can find our way to bed in one of those fancy hotels."

He got to his feet and Minna arose also, a little tired, a little apprehensive, but entirely submissive. Jim Wilson said, "Come on, baby. I sure won't want to lose you." He grinned at the others. "You guys coming?"

Frank's eyes met Nora's. He

shrugged. "Why not?" he said. "Unless you want to start walking."

"I'm too tired," Nora said.

As they stepped out through the smashed window, both Nora and Frank half-expected to see other forms moving up and down Madison Street. But there was no one. Only the unreal desolation of the lonely pavement and the dark-windowed buildings.

"The biggest ghost town on earth," Frank muttered.

Nora's hand had slipped into Frank's. He squeezed it and neither of them seemed conscious of the contact.

"I wonder," Nora said. "Maybe this is only one of them. Maybe all the other big cities are evacuated too."

Jim Wilson and Minna were walking ahead. He turned. "If you two can't sleep without finding out what's up, it's plenty easy to do."

"You think we could find a battery radio in some store?" Frank asked.

"Hell no! They'll all be gone. But all you'd have to do is snoop around in some newspaper office. If you can read you can find out what happened."

It seemed strange to Frank that he had not thought of this. Then he realized he hadn't tried very hard to think of anything at all. He was surprised, also, at his lack of fear. He's gone through life pretty much taking things as they came—as big a sucker as the next man—making more than his quota of mistakes and blunders. Finding himself completely alone in a deserted city for the first time in his life, he had naturally fallen prey to sudden fright. But

that had gradually passed, and now he was able to accept the new reality fairly passively. He wondered if that wasn't pretty much the way of all people. New situations brought a surge of whatever emotion fitted the picture. Then the emotion subsided and the new thing became the ordinary.

This, he decided, was the manner in which humanity survived. Humanity took things as they came. Pile on enough of anything and it becomes the ordinary.

Jim Wilson had picked up a garbage box and hurled it through the window of an electric shop. The glass came down with a crash that shuddered up the empty darkening street and grumbled off into silence. Jim Wilson went inside. "I'll see what I can find. You stay out here and watch for cops." His laughter echoed out as he disappeared.

Minna stood waiting silently, unmoving, and somehow she reminded Frank of a dumb animal; an unreasoning creature with no mind of her own, waiting for a signal from her master. Strangely, he resented this, but at the same time could find no reason for his resentment, except the feeling that no one should appear as much a slave as Minna.

Jim Wilson reappeared in the window. He motioned to Minna. "Come on in, baby. You and me's got to have a little conference." His exaggerated wink was barely perceptible in the gloom as Minna stepped over the low sill into the store. "Won't be long, folks," Wilson said in high good humor, and the two of them vanished into the darkness beyond.

Frank Brooks glanced at Nora, but her face was turned away. He cursed softly under his breath. He said, "Wait a minute," and went into the store through the huge, jagged opening.

Inside, he could barely make out the counters. The place was larger than it had appeared from the outside. Wilson and Minna were nowhere about.

Frank found the counter he was looking for and pawed out several flashlights. They were only empty tubes, but he found a case of batteries in a panel compartment against the wall.

"Who's there?"

"Me. I came in for some flashlights."

"Couldn't you wait?"

"It's getting dark."

"You don't have to be so damn impatient." Jim Wilson's voice was hostile and surly.

Frank stifled his quick anger. "We'll be outside," he said. He found Nora waiting where he'd left her. He loaded batteries into four flashlights before Jim Wilson and Minna reappeared.

Wilson's good humor was back. "How about the Morrison or the Sherman," he said. "Or do you want to get real ritzy and walk up to the Drake?"

"My feet hurt," Minna said. The woman spoke so rarely, Frank Brooks was startled by her words.

"Morrison's the closest," Jim Wilson said. "Let's go." He took Minna by the arm and swung off up the street. Frank and Nora fell in behind.

Nora shivered. Frank, holding her arm, asked, "Cold?"

"No. It's just all—unreal again."

"I see what you mean."

"I never expected to see the Loop dark. I can't get used to it."

A vagrant, whispering wind picked up a scrap of paper and whirled it along the street. It caught against Nora's ankle. She jerked perceptibly and kicked the scrap away. The wind caught it again and spiralled it away into the darkness.

"I want to tell you something," she said.

"Tell away."

"I told you before that I slept through the—the evacuation, or whatever it was. That wasn't exactly true. I did sleep through it, but it was my fault. I put myself to sleep."

"I don't get it."

"I tried to kill myself. Sleeping tablets. Seven of them. They weren't enough."

Frank said nothing while they paced off ten steps through the dark canyon that was Madison Street. Nora wondered if he had heard.

"I tried to commit suicide."

"Why?"

"I was tired of life, I guess."

"What do you want—sympathy?"

The sudden harshness in his voice brought her eyes around, but his face was a white blur.

"No—no, I don't think so."

"Well, you won't get it from me. Suicide is silly. You can have troubles and all that—everybody has them—but suicide—why did you try it?"

A high, thin whine—a wordless vibration of eloquence—needled out of the darkness into their ears. The shock was like a sudden shower

of ice water dashed over their bodies. Nora's fingers dug into Frank's arm, but he did not feel the cutting nails. "We're—there's someone out there in the street!"

TWENTY-FIVE feet ahead of where Frank and Nora stood frozen there burst the booming voice of Jim Wilson. "What the hell was that?" And the shock was dispelled. The white circle from Wilson's flash bit out across the blackness to outline movement on the far side of the street. Then Frank Brook's light, and Nora's, went exploring.

"There's somebody over there," Wilson bellowed. "Hey, you! Show your face! Quit sneaking around!"

Frank's light swept an arc that clearly outlined the buildings across the street and then weakened as it swung westward. There was something or someone back there, but obscured by the dimness. He was swept by a sense of unreality again.

"Did you see them?"

Nora's light beam had dropped to her feet as though she feared to point it out into the darkness. "I thought I saw something."

Jim Wilson was swearing industriously. "There was a guy over there. He ducked around the corner. Some damn fool out scrounging. Wish I had a gun."

Frank and Nora moved ahead and the four stood in a group. "Put out your lights," Wilson said. "They make good targets if the jerk's got any weapons."

They stood in the darkness, Nora holding tightly to Frank's arm. Frank said, "That was the damnd-

est noise I ever heard."

"Like a siren?" Frank thought Jim Wilson spoke hopefully, as though wanting somebody to agree with him.

"Not like any I ever heard. Not like a whistle, either. More of a moan."

"Let's get into that goddam hotel and—"

Jim Wilson's words were cut off by a new welling-up of the melancholy howling. It had a new pattern this time. It sounded from many places; not nearer, Frank thought, than Lake Street on the north, but spreading outward and backward and growing fainter until it died on the wind.

Nora was shivering, clinging to Frank without reserve.

Jim Wilson said, "I'll be damned if it doesn't sound like a signal of some kind."

"Maybe it's a language—a way of communication."

"But who the hell's communicating?"

"How would I know?"

"We best get to that hotel and bar a few doors. A man can't fight in the dark—and nothing to fight with."

They hurried up the street, but it was all different now. Gone was the illusion of being alone; gone the sense of solitude. Around them the ghost town had come suddenly alive. Sinister forces more frightening than the previous solitude had now to be reckoned with.

"Something's happened—something in the last few minutes," Nora whispered.

Frank leaned close as they crossed the street to the dark silent pile that

was the Morrison hotel. "I think I know what you mean."

"It's as though there was no one around and then, suddenly, they came."

"I think they came and went away again."

"Did you actually *see* anyone when you flashed your light?"

"No—I can't say positively that I did. But I got the impression there were figures out there—at least dozens of them—and that they moved back away from the light. Always just on the edge of it."

"I'm scared, Frank."

"So am I."

"Do you think it could all be imagination?"

"Those moans? Maybe the first one—I've heard of people imagining sounds. But not the last ones. And besides, we all heard them."

Jim Wilson, utterly oblivious of any subtle emanations in the air, boomed out in satisfaction: "We don't have to bust the joint open. The revolving door works."

"Then maybe we ought to be careful," Frank said. "Maybe somebody else is around here."

"Could be. We'll find out."

"Why are we afraid?" Nora whispered.

"It's natural, isn't it?" Frank melted the beam of his light with that of Jim Wilson. The white finger pierced the darkness inside. Nothing moved.

"I don't see why it should be. If there are people in there they must be as scared as we are."

Nora was very close to him as they entered.

The lobby seemed deserted. The flashlight beams scanned the empty

chairs and couches. The glass of the deserted cages threw back reflections.

"The keys are in there," Frank said. He vaulted the desk and scanned the numbers under the pigeon holes.

"We'd better stay down low," Jim Wilson said. "Damned if I'm going to climb to the penthouse."

"How about the fourth floor?"

"That's plenty high enough."

Frank came out with a handful of keys. "Odd numbers," he said. "Four in a row."

"Well I'll be damned," Jim Wilson muttered. But he said no more and they climbed the stairs in silence. They passed the quiet dining rooms and banquet halls, and by the time they reached the fourth floor the doors giving off the corridors had assumed a uniformity.

"Here they are." He handed a key to Wilson. "That's the end one." He said nothing as he gave Minna her key, but Wilson grunted, "For crissake!" in a disgusted voice, took Minna's key and threw it on the floor.

Frank and Nora watched as Wilson unlocked his door. Wilson turned. "Well, goodnight all. If you get goosed by any spooks, just yell."

Minna followed him without a word and the door closed.

Frank handed Nora her key. "Lock your door and you'll be safe. I'll check the room first." He unlocked the door and flashed his light inside. Nora was close behind him as he entered. He checked the bathroom. "Everything clear. Lock your door and you'll be safe."

"Frank."

"Yes?"

"I'm afraid to stay alone."

"You mean you want me to—"

"There are two beds here."

His reply was slow in coming. Nora didn't wait for it. Her voice rose to the edge of hysteria. "Quit being so damned righteous. Things have changed! Can't you realize that? What does it matter how or where we sleep? Does the world care? Will it make a damn bit of difference to the world whether I strip stark naked in front of you?" A sob choked in her throat. "Or would that outrage your morality."

He moved toward her, stopped six inches away. "It isn't that. For God's sake! I'm no saint. It's just that I thought you—"

"I'm plain scared, and I don't want to be alone. To me that's all that's important."

Her face was against his chest and his arms went around her. But her own hands were fists held together against him until he could feel her knuckles, hard, against his chest. She was crying.

"Sure," Frank said. "I'll stay with you. Now take it easy. Everything's going to be all right."

Nora sniffled without bothering to reach for her handkerchief. "Stop lying. You know it isn't going to be all right."

Frank was at somewhat of a loss. This flareup of Nora's was entirely unexpected. He eased toward the place the flashlight had shown the bed to be. Her legs hit its edge and she sat down.

"You—you want me to sleep in the other one?" he asked.

"Of course," Nora replied with marked bitterness. "I'm afraid you

wouldn't be very comfortable in with me."

There was a time of silence. Frank took off his jacket, shirt and trousers. It was funny, he thought. He'd spent his money, been drugged, beaten and robbed as a result of one objective—to get into a room alone with a girl. And a girl not nearly as nice as Nora at that. Now, here he was alone with a real dream, and he was tongue-tied. It didn't make sense. He shrugged. Life was crazy sometimes.

He heard the rustle of garments and wondered how much Nora was taking off. Then he dropped his trousers, forgotten, to the floor. "Did you hear that?"

"Yes. It's that—"

Frank went to the window, raised the sash. The moaning sound came in louder, but it was from far distance. "I think that's out around Evanston."

Frank felt a warmth on his cheek and he realized Nora was by his side, leaning forward. He put an arm around her and they stood unmoving in complete silence. Although their ears were straining for the sound coming down from the north, Frank could not be oblivious of the warm flesh under his hand.

Nora's breathing was soft against his cheek. She said, "Listen to how it rises and falls. It's almost as though they were using it to talk with. The inflection changes."

"I think that's what it is. It's coming from a lot of different places. It stops in some places and starts in others."

"It's so—weird."

"Spooky," Frank said, "but in a way it makes me feel better."

"I don't see how it could." Nora pressed closer to him.

"It does though, because of what I was afraid of. I had it figured out that the city was going to blow up—that a bomb had been planted that they couldn't find, or something like that. Now, I'm pretty sure it's something else. I'm willing to bet we'll be alive in the morning."

Nora thought that over in silence. "If that's the way it is—if some kind of invaders are coming down from the north—isn't it stupid to stay here? Even if we are tired we ought to be trying to get away from them."

"I was thinking the same thing. I'll go and talk to Wilson."

They crossed the room together and he left her by the bed and went on to the door. Then he remembered he was in his shorts and went back and got his trousers. After he'd put them on, he wondered why he'd bothered. He opened the door.

Something warned him—some instinct—or possibly his natural fear and caution coincided with the presence of danger. He heard the footsteps on the carpeting down the hall—soft, but unmistakably footsteps. He called, "Wilson—Wilson—that you?"

The creature outside threw caution to the winds. Frank sensed rather than heard a body hurtling toward the door. A shrill, mad laughter raked his ears and the weight of a body hit the door.

Frank drew strength from pure panic as he threw his weight against the panel, but perhaps an inch or two from the latch the door

wavcred from opposing strength. Through the narrow opening he could feel the hoarse breath of exertion in his face. Insane giggles and curses sounded through the black stillness.

Frank had the wild conviction he was losing the battle, and added strength came from somewhere. He heaved and there was a scream and he knew he had at least one finger caught between the door and the jamb. He threw his weight against the door with frenzied effort and heard the squash of the finger. The voice kited up to a shriek of agony, like that of a wounded animal.

Even with his life at stake, and the life of Nora, Frank could not deliberately slice the man's fingers off. Even as he fought the urge, and called himself a fool, he allowed the door to give slightly inward. The hand was jerked to safety.

At that moment another door opened close by and Jim Wilson's voice boomed: "What the hell's going on out here?"

Simultaneous with this, racing footsteps receded down the hall and from the well of the stairway came a whining cry of pain.

"Jumping jecs!" Wilson bel-lowed. "We got company. We ain't alone!"

"He tried to get into my room."

"You shouldn't have opened the door. Nora okay?"

"Yeah. She's all right."

"Tell her to stay in her room. And you do the same. We'd be crazy to go after that coot in the dark. He'll keep 'til morning."

Frank closed the door, double-locked it and went back to Nora's bed. He could hear a soft sobbing.

He reached down and pulled back the covers and the sobbing came louder. Then he was down on the bed and she was in his arms.

She cried until the panic subsided, while he held her and said nothing. After a while she got control of herself. "Don't leave me, Frank," she begged. "Please don't leave me."

He stroked her shoulder. "I won't," he whispered.

They lay for a long time in utter silence, each seeking strength in the other's closeness. The silence was finally broken by Nora.

"Frank?"

"Yes."

"Do you want me?"

He did not answer.

"If you want me you can have me, Frank."

Frank said nothing.

"I told you today that I tried to commit suicide. Remember?"

"I remember."

"That was the truth. I did it because I was tired of everything. Because I've made a terrible mess of things. I didn't want to go on living."

He remained silent, holding her.

As she spoke again, her voice sharpened. "Can't you understand what I'm telling you? I'm no good! I'm just a bum! Other men have had me! Why shouldn't you? Why should you be cheated out of what other men have had?"

He remained silent. After a few moments, Nora said, "For God's sake, talk! Say something!"

"How do you feel about it now? Will you try again to kill yourself the next chance you get?"

"No—no, I don't think I'll ever

try it again."

"Then things must look better."

"I don't know anything about that. I just don't want to do it now."

She did not urge him this time and he was slow in speaking. "It's kind of funny. It really is. Don't get the idea I've got morals. I haven't. I've had my share of women. I was working on one the night they slipped me the mickey—the night before I woke up to this tomb of a city. But now—tonight—its kind of different. I feel like I want to protect you. Is that strange?"

"No," she said quietly. "I guess not."

They lay there silently, their thoughts going off into the blackness of the sepulchral night. After a long while, Nora's even breathing told him she was asleep. He got up quietly, covered her, and went to the other bed.

But before he slept, the weird wailings from out Evanston way came again—rose and fell in that strange conversational cadence—then died away into nothing.

FRANK AWOKE to the first fingers of daylight. Nora still slept. He dressed and stood for some moments with his hand on the door knob. Then he threw the bolt and cautiously opened the door.

The hallway was deserted. At this point it came to him forcibly that he was not a brave man. All his life, he realized, he had avoided physical danger and had refused to recognize the true reason for so doing. He had classified himself as a man who dodged trouble through

good sense; that the truly civilized person went out of his way to keep the peace.

He realized now that that attitude was merely salve for his ego. He faced the empty corridor and did not wish to proceed further. But stripped of the life-long alibi, he forced himself to walk through the doorway, close the door softly, and move toward the stairs.

He paused in front of the door behind which Jim Wilson and Minna were no doubt sleeping. He stared at it wistfully. It certainly would not be a mark of cowardice to get Jim Wilson up under circumstances such as these. In fact, he would be a fool not to do so.

Stubbornness forbade such a move, however. He walked softly toward the place where the hallway dead-ended and became a cross-corridor. He made the turn carefully, pressed against one wall. There was no one in sight. He got to the stairway and started down.

His muscles and nerves tightened with each step. When he reached the lobby he was ready to jump sky-high at the drop of a pin.

But no one dropped any pins, and he reached the modernistic glass doorway to the drugstore with only silence screaming in his ears. The door was unlocked. One hinge squeaked slightly as he pushed the door inward.

It was in the drugstore that Frank found signs of the fourth-floor intruder. An inside counter near the prescription department was red with blood. Bandages and first-aid supplies had been unboxed and thrown around with abandon. Here the man had no doubt admin-

istered to his smashed hand.

But where had he gone? Asleep, probably, in one of the rooms upstairs. Frank wished fervently for a weapon. Beyond doubt there was not a gun left in the Loop.

A gun was not the only weapon ever created, though, and Frank searched the store and found a line of pocket knives still in neat boxes near the perfume counter.

He picked four of the largest and found, also, a wooden-handled, lead-tipped bludgeon, used evidently for cracking ice.

Thus armed, he went out through the revolving door. He walked through streets that were like death under the climbing sun. Through streets and canyons of dead buildings upon which the new daylight had failed to shed life or diminish the terror of the night past.

At Dearborn he found the door to the Tribune Public Service Building locked. He used the ice breaker to smash a glass door panel. The crash of the glass on the cement was an explosion in the screaming silence. He went inside. Here the sense of desolation was complete; brought sharply to focus, probably, by the pigeon holes filled with letters behind the want-ad counter. Answers to a thousand and one queries, waiting patiently for someone to come after them.

Before going to the basement and the back files of the Chicago Tribune, Frank climbed to the second floor and found what he thought might be there—a row of teletype machines with a file-board hooked to the side of each machine.

Swiftly, he stripped the copy sheets off each board, made a bun-

dle of them and went back downstairs. He covered the block back to the hotel at a dog-trot, filled with a sudden urge to get back to the fourth floor as soon as possible.

He stopped in the drugstore and filled his pockets with soap, a razor, shaving cream and face lotion. As an afterthought, he picked up a lavish cosmetic kit that retailed, according to the price tag, for thirty-eight dollars plus tax.

He let himself back into the room and closed the door softly. Nora rolled over, exposing a shoulder and one breast. The breast held his gaze for a full minute. Then a feeling of guilt swept him and he went into the bathroom and closed the door.

Luckily, a supply tank on the roof still contained water and Frank was able to shower and shave. Dressed again, he felt like a new man. But he regretted not hunting up a haberdashery shop and getting himself a clean shirt.

Nora had still not awakened when he came out of the bathroom. He went to the bed and stood looking down at her for some time. Then he touched her shoulder.

"Wake up. It's morning."

Nora stirred. Her eyes opened, but Frank got the impression she did not really awaken for several seconds. Her eyes went to his face, to the window, back to his face.

"What time is it?"

"I don't know. I think it's around eight o'clock."

Nora stretched both arms luxuriously. As she sat up, her slip fell back into place and Frank got the impression she hadn't even been ware of her partial nudity.

She stared up at him, clarity



dawning in her eyes. "You're all cleaned up."

"I went downstairs and got some things."

"You went out—alone?"

"Why not. We can't stay in here all day. We've got to hit the road and get out of here. We've overshot our luck already."

"But that—that man in the hall last night! You shouldn't have taken a chance."

"I didn't bump into him. I found the place he fixed his hand, down in the drugstore."

Frank went to the table and came back with the cosmetic set. He put it in Nora's lap. "I brought this up for you."

Surprise and true pleasure were mixed in her expression. "That was very nice. I think I'd better get dressed."

Frank turned toward the window where he had left the bundle of teletype clips. "I've got a little reading to do."

As he sat down, he saw, from the corner of his eye, a flash of slim brown legs moving toward the bathroom. Just inside the door, Nora turned. "Are Jim Wilson and Minna up yet?"

"I don't think so."

Nora's eyes remained on him. "I think you were very brave to go downstairs alone. But it was a foolish thing to do. You should have waited for Jim Wilson."

"You're right about it being foolish. But I had to go."

"Why?"

"Because I'm not brave at all. Maybe that was the reason."

Nora left the bathroom door open about six inches and Frank

heard the sound of the shower. He sat with the papers in his hand wondering about the water. When he had gone to the bathroom the thought had never occurred to him. It was natural that it should. Now he wondered about it. Why was it still running? After a while he considered the possibility of the supply tank on the roof.

Then he wondered about Nora. It was strange how he could think about her personally and impersonally at the same time. He remembered her words of the previous night. They made her—he shied from the term. What was the old cliché? A woman of easy virtue.

What made a woman of that type, he wondered. Was it something inherent in their makeup? That partially opened door was symbolic somehow. He was sure that many wives closed the bathroom door upon their husbands; did it without thinking, instinctively. He was sure Nora had left it partially open without thinking. Could a behavior pattern be traced from such an insignificant thing?

He wondered about his own attitude toward Nora. He had drawn away from what she'd offered him during the night. And yet from no sense of disgust. There was certainly far more about Nora to attract than to repel.

Morals, he realized dimly, were imposed—or at least functioned—for the protection of society. With society gone—vanished overnight—did the moral code still hold?

If and when they got back among masses of people, would his feelings toward Nora change? He thought not. He would marry her, he told

himself firmly, as quick as he'd marry any other girl. He would not hold what she was against her. I guess I'm just fundamentally unmoral myself, he thought, and began reading the news clips.

THERE WAS a knock on the door accompanied by the booming voice of Jim Wilson. "You in there! Ready for breakfast?"

Frank got up and walked toward the door. As he did so, the door to the bathroom closed.

Jim Wilson wore a two-day growth of beard and it didn't seem to bother him at all. As he entered the room he rubbed his hands together in great gusto. "Well, where'll we eat, folks? Let's pick the classiest restaurant in town. Nothing but the best for Minna here."

He winked broadly as Minna, expressionless and silent, followed him in exactly as a shadow would have followed him and sat primly down in a straight-backed chair by the wall.

"We'd better start moving south," Frank said, "and not bother about breakfast."

"Getting scared?" Jim Wilson asked.

"You're damn right I'm scared—now. We're right in the middle of a big no-man's-land."

"I don't get you."

At that moment the bathroom door opened and Nora came out. Jim Wilson forgot about the question he'd asked. He let forth a loud whistle of appreciation. Then he turned his eyes on Frank and his thought was crystal clear. He was

envying Frank the night just passed.

A sudden irritation welled up in Frank Brooks, a distinct feeling of disgust. "Let's start worrying about important things—our lives. Or don't you consider your life very important?"

Jim Wilson seemed puzzled. "What the hell's got into you? Didn't you sleep good?"

"I went down the block this morning and found some teletype machines. I've just been reading the reports."

"What about that guy that tried to get into your room last night?"

"I didn't see him. I didn't see anybody. But I know why the city's been cleaned out." Frank went back to the window and picked up the sheaf on clips he had gone through. Jim Wilson sat down on the edge of the bed, frowning. Nora followed Frank and perched on the edge of the chair he dropped into.

"The city going to blow up?" Wilson asked.

"No. We've been invaded by some form of alien life."

"Is that what the papers said?"

"It was the biggest and fastest mass evacuation ever attempted. I pieced the reports together. There was hell popping around here during the two days we—we waited it out."

"Where did they all go?" Nora asked.

"South. They've evacuated a forty-mile strip from the lake west. The first Terran defense line is set up in northern Indiana."

"What do you mean—Terra?"

"It's a word that means Earth—this planet. The invaders came from some other planet, they think—at

least from no place on Earth."

"That's the silliest damn thing I ever heard of," Wilson said.

"A lot of people probably thought the same thing," Frank replied. "Flying saucers were pretty common. Nobody thought they were anything and nobody paid much attention. Then they hit—three days ago—and wiped out every living soul in three little southern Michigan towns. From there they began spreading out. They—"

Each of them heard the sound at the same time. A faint rumble, increasing swiftly into high thunder. They moved as one to the window and saw four jet planes, in formation, moving across the sky from the south.

"There they come," Frank said. "The fight's started. Up to now the army has been trying to get set, I suppose."

Nora said, "Is there any way we can hail them? Let them know—"

Her words were cut off by the horror of what happened. As they watched, the plane skimmed low across the Loop. At a point, approximately over Lake Street, Frank estimated, the planes were annihilated. There was a flash of blue fire coming in like jagged lightning to form four balls of fire around the planes. The fire balls turned, almost instantly, into globes of white smoke that drifted lazily away.

And that was all. But the planes vanished completely.

"What happened?" Wilson muttered. "Where'd they go?"

"It was as if they hit a wall," Nora said, her voice hushed with awe.

"I think that *was* what happened," Frank said. "The invaders have some kind of a weapon that holds us helpless. Otherwise the army wouldn't have established this no-man's-land and pulled out. The reports said we have them surrounded on all sides with the help of the lake. We're trying to keep them isolated."

Jim Wilson snorted. "It looks like we've got them right where they want us."

"Anyhow, we're damn fools to stick around here. We'd better head south."

Wilson looked wistfully about the room. "I guess so, but it's a shame—walking away from all this."

Nora was staring out the window, a small frown on her face. "I wonder who they are and where they came from?"

"The teletype releases were pretty vague on that."

She turned quickly. "There's something peculiar about them. Something really strange."

"What do you mean?"

"Last night when we were walking up the street. It must have been these invaders we heard. They must have been across the street. But they didn't act like invaders. They seemed—well, scared. I got the feeling they ran from us in panic. And they haven't been back."

Wilson said, "They may not have been there at all. Probably our imaginations."

"I don't think so," Frank cut in. "They were there and then they were gone. I'm sure of it."

"Those wailing noises. They were certainly signalling to each other. Do you suppose that's the

only language they have?" Nora walked over and offered the silent Minna a cigarette. Minna refused with a shake of her head.

"I wish we knew what they looked like," Frank said. "But let's not sit here talking. Let's get going."

Jim Wilson was scowling. There was a marked sullenness in his manner. "Not Minna and me. I've changed my mind. I'm sticking here."

Frank blinked in surprise. "Are you crazy? We've run our luck out already. Did you see what happened to those planes?"

"The hell with the planes. We've got it good here. This I like. I like it a lot. We'll stay."

"Okay," Frank replied hotly, "but talk for yourself. You're not making Minna stay!"

Wilson's eyes narrowed. "I'm not? Look, buster—how about minding your own goddam business?"

The vague feelings of disgust Frank had had now crystallized into words. "I won't let you get away with it! You think I'm blind? Hauling her into the back room every ten minutes! Don't you think I know why? You're nothing but a damn sex maniac! You've got her terrorized until she's afraid to open her mouth. She goes with us!"

Jim Wilson was on his feet. His face blazed with rage. The urge to kill was written in the crouch of his body and the twist of his mouth. "You goddam nose little squirt. I'll—"

Wilson charged across the short, intervening distance. His arms went out in a clutching motion.

But Frank Brooks wasn't full of knockout drops this time, and with a clear head he was no pushover. Blinded with rage, Jim Wilson *was* a pushover. Frank stepped in between his outstretched arms and slugged him squarely on top of the head with the telephone. Wilson went down like a felled steer.

The scream came from Minna as she sprang across the room. She had turned from a colorless rag doll into a tigress. She hit Frank square in the belly with small fists at the end of stiff, outstretched arms. The full force of her charge was behind the fists, and Frank went backward over the bed.

Minna did not follow up her attack. She dropped to the floor beside Jim Wilson and took his huge head in her lap. "You killed him," she sobbed. "You—you murderer! You killed him! You had no right!"

Frank sat wide-eyed. "Minna! For God's sake! I was helping you. I did it for you!"

"Why don't you mind your business? I didn't ask you to protect me? I don't need any protection—not from Jim."

"You mean you didn't mind the way he's treated you—"

"You've killed him—killed him—" Minna raised her head slowly. She looked at Frank as though she saw him for the first time. "You're a fool," she said dully. "A big fool. What right have you got to meddle with other people's affairs? Are you God or something, to run people's lives?"

"Minna—I—"

It was as though he hadn't spoken. "Do you know what it's like to have nobody? All your life to go

on and grow older without anybody? I didn't have no one and then Jim came along and wanted me."

Frank walked close to her and bent down. She reacted like a tiger. "Leave him alone! Leave him alone! You've done enough!"

Nonplused, Frank backed away.

"People with big noses—always sticking them in. That's you. Was that any of your business what he wanted of me? Did I complain?"

"I'm sorry, Minna. I didn't know."

"I'd rather go into back rooms with him than stay in front rooms without nobody."

She began to cry now. Wordlessly—soundlessly, rocking back and forth with the huge man's bloody head in her lap. "Anytime," she crooned. "Anytime I would—"

The body in her arms stirred. She looked down through her tears and saw the small black eyes open. They were slightly crossed, unfocused as they were by the force of the blow. They straightened and Jim mumbled, "What the hell—what the hell—"

Minna's time for talking seemed over. She smiled—a smile hardly perceptible, as though it was for herself alone. "You're all right," she said. "That's good. You're all right."

Jim pushed her roughly away and staggered to his feet. He stood swaying for a moment, his head turning; for all the world like a bull blinded and tormented. Then his eyes focused on Frank.

"You hit me with the goddam phone."

"Yeah—I hit you."

"I'm gonna kill you."

"Look—I made a mistake." Frank picked up the phone and backed against the wall. "I hit you, but you were coming at me. I made a mistake and I'm sorry."

"I'll smash your goddam skull."

"Maybe you will," Frank said grimly. "But you'll work for it. It won't come easy."

A new voice bit across the room. "Cut it out. I'll do the killing. That's what I like best. Everybody quiet down."

They turned and saw a slim, pale-skinned young man in the open doorway. The door had opened quietly and no one had heard it. Now the pale young man was standing in the room with a small, nickle-plated revolver in his right hand.

The left hand was close down at his side. It was swathed generously in white bandage.

The young man chuckled. "The last four people in the world were in a room," he said, "and there was a knock on the door."

His chuckle deepened to one of pure merriment. "Only there wasn't a knock. A man just walked in with a gun that made him boss."

No one moved. No one spoke. The man waited, then went on: "My name is Leroy Davis. I lived out west and I always had a keeper because they said I wasn't quite right. They wanted me to pull out with the rest of them, but I slugged my keeper and here I am."

"Put down the gun and we'll talk it over," Frank said. "We're all in this together."

"No, we aren't. I've got a gun, so that makes me top man. You're all

in it together, but I'm not. I'm the boss, and which one of you tried to cut my hand off last night."

"You tried to break in here yelling and screaming like a madman. I held the door. What else could I do?"

"It's all right. I'm not mad. My type—we may be nuts, but we never hold a grudge. I can't remember much about last night. I found some whisky in a place down the street and whisky drives me nuts. I don't know what I'm doing when I drink whisky. They say once about five years ago I got drunk and killed a little kid, but I don't remember."

Nobody spoke.

"I got out of it. They got me out some way. High priced lawyers got me out. Cost my dad a pile."

Hysteria had been piling up inside of Nora. She had held it back, but now a little of it spurted out from between her set teeth. "Do something, somebody. *Isn't anybody going to do anything?*"

Leroy Davis blinked at her. "There's nothing they can do, honey," he said in a kindly voice. "I've got the gun. They'd be crazy to try anything."

Nora's laugh was like the rattle of dry peas. She sat down on the bed and looked up at the ceiling and laughed. "It's crazy. It's all so crazy! We're sitting here in a doomed city with some kind of alien invaders all around us and we don't know what they look like. They haven't hurt us at all. We don't even know what they look like. We don't worry a bit about them because we're too busy trying to kill each other."

Frank Brooks took Nora by the arm. "Stop it! Quit laughing like that!"

Nora shook him off. "Maybe we need someone to take us over. It's all pretty crazy!"

"Stop it."

Nora's eyes dulled down as she looked at Frank. She dropped her head and seemed a little ashamed of herself. "I'm sorry. I'll be quiet."

Jim Wilson had been standing by the wall looking first at the newcomer, then back at Frank Brooks. Wilson seemed confused as to who his true enemy really was. Finally he took a step toward Leroy Davis.

Frank Brooks stopped him with a motion, but kept his eyes on Davis. "Have you seen anybody else?"

Davis regarded Frank with long, careful consideration. His eyes were bright and birdlike. They reminded Frank of a squirrel's eyes. Davis said, "I bumped into an old man out on Halstead Street. He wanted to know where everybody had gone. He asked me, but I didn't know."

"What happened to the old man?" Nora asked. She asked the question as though dreading to do it; but as though some compulsion forced her to speak.

"I shot him," Davis said cheerfully. "It was a favor, really. Here was this old man staggering down the street with nothing but a lot of wasted years to show for his efforts. He was no good alive, and he didn't have the courage to die." Davis stopped and cocked his head brightly. "You know—I think that's what's been wrong with the world. Too many people without the guts to die, and a law against killing them."

It had now dawned upon Jim Wilson that they were faced by a maniac. His eyes met those of Frank Brooks and they were—on this point at least—in complete agreement. A working procedure sprang up, unworded, between them. Jim Wilson took a slow, casual step toward the homicidal maniac.

"You didn't see anyone else?" Frank asked.

Davis ignored the question. "Look at it this way," he said. "In the old days they had Texas long horns. Thin stringy cattle that gave up meat as tough as leather. Do we have cattle like that today? No. Because we bred out the weak line."

Frank said, "There are some cigarettes on that table if you want one."

Jim Wilson took another slow step toward Davis.

Davis said, "We bred with intelligence, with a thought to what a steer was for and we produced a walking chunk of meat as wide as it is long."

"Uh-huh," Frank said.

"Get the point? See what I'm driving at? Humans are more important than cattle, but can we make them breed intelligently? Oh, no! That interferes with damn silly human liberties. You can't tell a man he can only have two kids. It's his God-given right to have twelve when the damn moron can't support three. Get what I mean?"

"Sure—sure, I get it."

"You better think it over, mister—and tell that fat bastard to quit sneaking up on me or I'll blow his brains all over the carpet!"

If the situation hadn't been so grim it would have appeared ludi-

crous. Jim Wilson, feeling success almost in his grasp, was balanced on tiptoe for a lunge. He teetered, almost lost his balance and fell back against the wall.

"Take it easy," Frank said.

"I'll take it easy," Davis replied. "I'll kill every goddam one of you —" he pointed the gun at Jim Wilson. "—starting with him."

"Now wait a minute," Frank said. "You're unreasonable. What right have you got to do that? What about the law of survival? You're standing there with a gun on us. You're going to kill us. Isn't it natural to try anything we can to save our own lives?"

A look of admiration brightened Davis' eyes. "Say! I like you. You're all right. You're logical. A man can talk to you. If there's anything I like it's talking to a logical man."

"Thanks."

"Too bad I'm going to have to kill you. We could sit down and have some nice long talks together."

"Why do you want to kill us?"

Minna asked. She had not spoken before. In fact, she had spoken so seldom during the entire time they'd been together that her voice was a novelty to Frank. He was inclined to discount her tirade on the floor with Wilson's head in her lap. She had been a different person then. Now she had lapsed back into her old shell.

Davis regarded thoughtfully. "Must you have a reason?"

"You should have a reason to kill people."

Davis said, "All right, if it will make you any happier. I told you about killing my keeper when they

tried to make me leave town. He got in the car, behind the wheel. I got into the back seat and split his skull with a tire iron."

"What's that got to do with us?"

"Just this. Tommy was a better person than anyone of you or all of you put together. If he had to die, what right have you got to live? Is that enough of a reason for you?"

"This is all too damn crazy," Jim Wilson roared. He was on the point of leaping at Davis and his gun.

At that moment, from the north, came a sudden crescendo of the weird invader wailings. It was louder than it had previously been but did not seem nearer.

The group froze, all ears trained upon the sound. "They're talking again," Nora whispered.

"Uh-huh," Frank replied. "But it's different this time. As if—"

"—as if they were getting ready for something," Nora said. "Do you suppose they're going to move south?"

Davis said, "I'm not going to kill you here. We're going down stairs."

The pivotal moment, hinged in Jim Wilson's mind, that could have changed the situation, had come and gone. The fine edge of additional madness that would make a man hurl himself at a loaded gun, was dulled. Leroy Davis motioned pre-emptorily toward Minna.

"You first—then the other babe. You walk side by side down the hall with the men behind you. Straight down to the lobby."

They complied without resistance. There was only Jim Wilson's scowl, Frank Brooks' clouded eyes, and the white, taut look of Nora.

Nora's mind was not on the gun.

It was filled with thoughts of the pale maniac who held it. He was in command. Instinctively, she felt that maniacs in command have one of but two motivations—sex and murder. Her reaction to possible murder was secondary. But what if this man insisted upon laying his hands upon her. What if he forced her into the age old thing she had done so often? Nora shuddered. But it was also in her mind to question, and be surprised at the reason for her revulsion. She visualized the hands upon her body—the old familiar things, and the taste in her mouth was one of horror.

She had never experienced such shrinkings before. Why now. Had she herself changed? Had something happened during the night that made the past a time of shame? Or was it the madman himself? She did not know.

Nora returned from her musings to find herself standing in the empty lobby. Leroy Davis, speaking to Frank, was saying. "You look kind of tricky to me. Put your hands on your head. Lock your fingers together over your head and keep your hands there."

Jim Wilson was standing close to the mute Minna. She had followed all the orders without any show of anger, with no outward expression. Always she had kept her eyes on Jim Wilson. Obviously, whatever Jim ordered, she would have done without question.

Wilson leaned his head down toward her. He said, "Listen, baby, there's something I keep meaning to ask but I always forget it. What's your last name?"

"Trumble—Minna Trumble. I

thought I told you."

"Maybe you did. Maybe I didn't get it."

Nora felt the hysteria welling again. "How long are you going to keep doing this?" she asked.

Leroy Davis cocked his head as he looked at her. "Doing what?"

"Play cat and mouse like this. Holding us on a pin like flies in an exhibit."

Leroy Davis smiled brightly. "Like a butterfly in your case, honey. A big, beautiful butterfly."

"What are you going to do," Frank Brooks snapped. "Whatever it is, let's get it over with?"

"Can't you see what I'm doing?" Davis asked with genuine wonder. "Are you that stupid? I'm being the boss. I'm in command and I like it. I hold life and death over four people and I'm savoring the thrill of it. You're pretty stupid, mister, and if you use that 'can't get away with it' line, I'll put a bullet into your left ear and watch it come out your right one."

Jim Wilson's fists were doubled. He was again approaching the reckless point. And again it was dulled by the gradually increasing sound of a motor—not in the air, but from the street level to the south.

It was a sane, cheerful sound and was resented instantly by the insane mind of Leroy Davis.

He tightened even to the point that his face grew more pale from the tension. He backed to a window, looked out quickly, and turned back. "It's a jeep," he said. "They're going by the hotel. If anybody makes a move, or yells, they'll find four bodies in here and me

gone. That's what I'm telling you and you know I'll do it."

They knew he *would* do it and they stood silent, trying to dredge up the nerve to make a move. The jeep's motor backfired a couple of times as it approached Madison Street. Each time, Leroy Davis' nerves reacted sharply and the four people kept their eyes trained on the gun in his hand.

The jeep came to the intersection and slowed down. There was a conference between its two occupants—helmeted soldiers in dark brown battle dress. Then the jeep moved on up Clark Street toward Lake.

A choked sigh escaped from Nora's throat. Frank Brooks turned toward her. "Take it easy," he said. "We're not dead yet. I don't think he wants to kill us."

The reply came from Minna. She spoke quietly. "I don't care. I can't stand any more of this. After all, we aren't animals. We're human beings and we have a right to live and die as we please."

Minna walked toward Leroy Davis. "I'm not afraid of your gun any more. All you can do with it is kill me. Go ahead and do it."

Minna walked up to Leroy Davis. He gaped at her and said, "You're crazy! Get back there. You're a crazy dame!"

He fired the gun twice and Minna died appreciating the incongruity of his words. She went out on a note of laughter and as she fell, Jim Wilson, with an echoing animal roar, lunged at Leroy Davis. His great hand closed completely over that of Davis, hiding the gun. There was a muffled explosion and the bullet cut unnoticed through

Wilson's palm. Wilson jerked the gun from Davis' weak grasp and hurled it away. Then he killed Davis.

He did it slowly, a surprising thing for Wilson. He lifted Davis by his neck and held him with his feet off the floor. He squeezed Davis' neck, seeming to do it with great leisure as Davis made horrible noises and kicked his legs.

Nora turned her eyes away, buried them in Frank Brooks' shoulder, but she could not keep the sounds from reaching her ears. Frank held her close. "Take it easy," he said. "Take it easy." And he was probably not conscious of saying it.

"Tell him to hurry," Nora whispered. "Tell him to get it over with. It's like killing—killing an animal." "That's what he is—an animal."

Frank Brooks stared in fascination at Lefoy Davis' distorted, darkening face. It was beyond semblance of anything human now. The eyes bulged and the tongue came from his mouth as though frantically seeking relief.

The animal sounds quieted and died away. Nora heard the sound of the body falling to the floor—a limp, soft sound of finality. She turned and saw Jim Wilson with his hands still extended and cupped. The terrible hands from which the stench of a terrible life was drifting away into empty air.

Wilson looked down at his handiwork. "He's dead," Wilson said slowly. He turned to face Frank and Nora. There was a great disappointment in his face. "That's all there is to it," he said, dully. "He's just—dead." Without know-

ing it for what it was, Jim Wilson was full of the futile aftertaste of revenge.

He bent down to pick up Minna's body. There was a small blue hole in the right cheek and another one over the left eye. With a glance at Frank and Nora, Jim Wilson covered the wounds with his hand as though they were not decent. He picked her up in his arms and walked across the lobby and up the stairs with the slow, quiet tread of a weary man.

The sound of the jeep welled up again, but it was further away now. Frank Brooks took Nora's hand and they hurried out into the street. As they crossed the sidewalk, the sound of the jeep was drowned by a sudden swelling of the wailings to the northward.

On still a new note, they rose and fell on the still air. A note of panic, of new knowledge, it seemed, but Frank and Nora were not paying close attention. The sounds of the jeep motor had come from the west and they got within sight of the Madison-Well intersection in time to see the jeep hurtle southward at its maximum speed.

Frank yelled and waved his arms, but he knew he had been neither seen nor heard. They were given little time for disappointment however, because a new center of interest appeared to the northward. From around the corner of Washington Street, into Clark, moved three strange figures.

There was a mixture of belligerence and distress in their actions. They carried odd looking weapons and seemed interested in using them upon something or someone, but

they apparently lacked the energy to raise them although they appeared to be rather light.

The creatures themselves were humanoid, Frank thought. He tightened his grip on Nora's hand. "They've seen us."

"Let's not run," Nora said. "I'm tired of running. All it's gotten us is trouble. Let's just stand here."

"Don't be foolish."

"I'm not running. You can if you want to."

Frank turned his attention back to the three strange creatures. He allowed natural curiosity full reign. Thoughts of flight vanished from his mind.

"They're so thin—so fragile," Nora said.

"But their weapons aren't."

"It's hard to believe, even seeing them, that they're from another planet."

"How so? They certainly don't look much like us."

"I mean with the talk, for so long, about flying saucers and space flight and things like that. Here they are, but it doesn't seem possible."

"There's something wrong with them."

This was true. Two of the strange beings had fallen to the sidewalk. The third came doggedly on, dragging one foot after the other until he went to his hands and knees. He remained motionless for a long time, his head hanging limply. Then he too, sank to the cement and lay still.

The wailings from the north now took on a tone of intense agony—great desperation. After that came a yawning silence.

THEY DEFEATED themselves," the military man said. "Or rather, natural forces defeated them. We certainly had little to do with it."

Nora, Frank, and Jim Wilson stood at the curb beside a motorcycle. The man on the cycle supported it with a leg propped against the curb as he talked.

"We saw three of them die up the street," Frank said.

"Our scouting party saw the same thing happen. That's why we moved in. It's about over now. We'll know a lot more about them and where they came from in twenty-four hours."

They had nothing further to say. The military man regarded them thoughtfully. "I don't know about you three. If you ignored the evacuation through no fault of your own and can prove it—"

"There were four of us," Jim Wilson said. "Then we met another man. He's inside on the floor. I killed him."

"Murder?" the military man said sharply.

"He killed a woman who was with us," Frank said. "He was a maniac. When he's identified I'm pretty sure he'll have a past record."

"Where is the woman's body?"

"On a bed upstairs," Wilson said.

"I'll have to hold all of you. Martial law exists in this area. You're in the hands of the army."

THE STREETS were full of people now, going about their business, pushing and jostling, eating in the restaurants, making electricity for the lights, generating

power for the telephones.

Nora, Frank, and Jim Wilson sat in a restaurant on Clark Street. "We're all different people now," Nora said. "No one could go through what we've been through and be the same."

Jim Wilson took her statement listlessly. "Did they find out what it was about our atmosphere that killed them?"

"They're still working on that, I think." Frank Brooks stirred his coffee, raised a spoonful and let it drip back into the cup.

"I'm going up to the Chicago Avenue police station," Wilson said.

Frank and Nora looked up in surprise. Frank asked, "Why? The military court missed it—the fact you escaped from jail."

"They didn't miss it I don't think. I don't think they cared much. I'm going back anyway."

"It won't be much of a rap."

"No, a pretty small one. I want to get it over with."

He got up from his chair. "So long. Maybe I'll see you around."

"So long."

"Goodbye."

Frank said, "I think I'll beat it too. I've got a job in a factory up north. Maybe they're operating again." He got to his feet and stood awkwardly by the table. "Besides—I've got some pay coming."

Nora didn't say anything.

Frank said, "Well—so long. Maybe I'll see you around."

"Maybe. Goodbye."

Frank Brooks walked north on Clark Street. He was glad to get away from the restaurant. Nora was a good kid but hell—you didn't take up with a hooker. A guy played around, but you didn't stick with them.

But it made a guy think. He was past the kid stage. It was time for him to find a girl and settle down. A guy didn't want to knock around all his life.

Nora walked west on Madison Street. Then she remembered the Halstead Street slums were in that direction and turned south on Wells. She had nine dollars in her bag and that worried her. You couldn't get along on nine dollars in Chicago very long.

There was a tavern on Jackson near Wells. Nora went inside. The barkeep didn't frown at her. That was good. She went to the bar and ordered a beer and was served.

After a while a man came in. A middle aged man who might have just come into Chicago—whose bags might still be at the LaSalle Street Station down the block. The man looked at Nora, then away. After a while looked at her again.

Nora smiled.

If earthlings are looking for an "incident" the gods of chance will furnish one. On Lobe, however, it might be merely a negligible—

Margin of Error

By Richard Deeming

Illustrated by Bob Martin



ON JANUARY 1st, 1980, a small Negro boy in Porto Rico was hunting rats with an ancient .22 caliber single-shot rifle. At one minute after twelve noon he looked up as the jet mail express from Communist Haiti zoomed by a quarter mile offshore and ten thousand feet high, en route to Communist Trinidad. As sometimes happens in imaginative childhood, the boy visualized the far-off jet express as a bird and raised his rifle to his shoulder. He said "bang!" and somehow the tiny rifle went off. To his horror the jet express immediately performed a loop and plunged into the sea.

Within twenty-four hours, the small boy had been magnified into an anti-aircraft crew, and an incident had been manufactured. This, because an incident was desired by one Marshall Igor Matoshek—Dictator of Russia—and a great many other nations. On January 2nd, 1980, Matoshek addressed, by television, the two and one-half billion people under his rule, plus the two-hundred million people not under his rule, he simply announced that the warmongering bourgeois dictatorship which ruled the Tri-federation of North America and the Island of Porto Rico had vilely attacked the free and peace-loving democracies of the Communist International, and that a state of war existed.

At the same time, an extremely unimportant conference was taking place on the planet Lobe, eight light years away from the planet Earth.

Since the participants in this con-



ference conversed by thought transference in a language not translatable into any language ever employed on Earth, and even impossible to indicate phonetically, only its substance can be given. For the same reason there is no way to express the true names of the participants, so for purposes of convenience they are arbitrarily designated Horace, George and Junior.

In the extremely advanced civilization of Lobe, Horace was the Earthly equivalent of a kindergarten teacher. He was a tall, distinguished looking Lobian with nearly white antennae, but a beak unchipped by age and a firm, unwrinkled underside where it was unprotected by his shell.

The position of George in Lobian economy has no counterpart on Earth, and therefore cannot be accurately described. Approximately, he was something like a skilled artisan, though his work was entirely mental, consisting of polishing the raw thoughts of workers higher in the Lobian professional scale. Biologically it is easier to put a finger on George, however. He was the father of Junior.

Junior was the subject of the conference.

"It is difficult and embarrassing to tell a parent his child is subnormal," Horace was transmitting, glancing first at Junior to make sure his receiving antenna was retracted as ordered. "I hope you understand the delicacy of my position."

"Of course, professor," George radioed back glumly. "It's just that I had such hopes for the lad." His thought trailed off and he waved several tentacles vaguely.

"Being a drone will at least be a pleasant life," Horace reassured him. "Junior will be happy. You have the consolation of the Act being in force anyway. Ten years ago he would have been destroyed."

George absorbed this with small solace. Examining his son, he felt a twinge of compassion because the lad so resembled his dead mother. The same delicate sight-tubes, shining black beak and gentle curve to the brittle plate encasing his shoulders. He signalled the youngster to thrust out his receiving antenna.

"Your teacher tells me you have a little trouble with your work, son," he transmitted gently. "Is there anything particular bothering you?"

In the high frequency of the very young, Junior sent back, "It's my margin of error, Father. I understand the principles of the problems, but my answers come out wrong. I seem to make mechanical mistakes."

George glanced at Horace inquiringly, and the teacher motioned Junior to retract his antenna again.

"An indication of an intermittent break in the thought pattern," he explained. "With our present knowledge, nothing can be done for

him. He can absorb knowledge, of course. Under our modern teaching methods we can impart knowledge to an imbecile." His expression indicated he believed that the situation in this case. "But he could never be allowed to perform even the simplest problem except under supervision. Conceive what might happen if we even trained him to become merely a thought-link computer. He might insert an error whose end result could throw the entire universe out of balance."

"Would you mind my watching while he worked some simple problem?" George radioed.

"Of course not." Again the teacher signalled his student, and Junior's antenna obediently shot out. "Your father would like to see you at work, Junior. Take him into your room and explain the problem you were doing when we interrupted you." Then he paused and added a caution. "No practical application until I have checked your calculations, however."

Two and a half billion communist subjects watched the televised image of Marshall Igor Matoshkek with stoic resignation and cheered with mechanical enthusiasm. Two-hundred million people in the three republics of North America and on the Island of Porto Rico watched the same image with fear in their hearts.

"We stand on the threshold of the greatest era in history," intoned the most important man in the world. "The outcome of the vast struggle in which we are about to engage will determine the destiny of this planet for all time. No sin-

gle instance in the known past has ever been of such import."

The President of the Tri-federation of North America did not wait for the talk to end. He lifted his telephone and ordered the H-bomb shields aloft at once.

"The first problem is simple enough," Junior explained to his father. He indicated a small scanning screen, and twisted dials until a section of the heavens was visible. "One at a time I take each of the twenty-two solar systems outside of our own and compute what effect its mass and location has on the location of this planet. In other thoughts, if the particular solar system were not in existence, and consequently not exerting its gravitational pull on Lobe, what would Lobe's orbit around our sun be?"

"I see," Gorge transmitted.

"On that part I made no mistakes," Junior sent proudly. "Teacher checked all my answers himself." Then his expression became glum. "The second part was to take each individual planet of each solar system and compute what effect its mass and location has, first, on its own solar system and, second, on our planet. I used the proper formulae and have all my answers, but teacher has not yet checked them."

Examining the youngster's glum expression, George retracted his sending antenna and thought to himself, "The lad doesn't seem to have much faith in the answers he got."

"At this moment the great guided missile emplacements at Paris, Lon-

don, Honolulu and Rio de Janeiro are preparing to launch destruction at every principal city in North America and Porto Rico," Marshall Matoshek informed his audience. "The fire-control officers of these batteries are watching and listening to me just as you others are. The signal to fire will come from me right there on your screen."

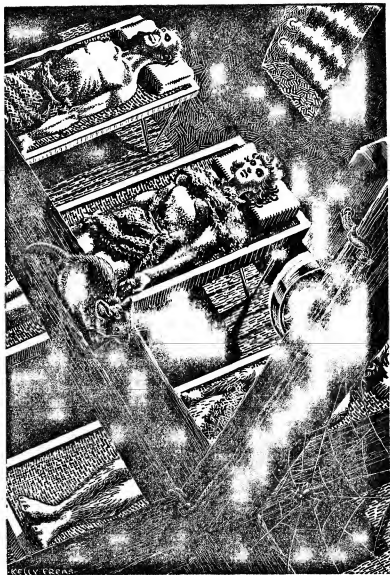
He paused to let this sink in. "The Communist International is averse to destruction where peaceful methods are possible, however. My aide-de-camp, General Serge Marik, is awaiting transoceanic connection with the President of the Tri-federation of North America at this very moment. If the three republics of North America and the Island of Porto Rico agree to surrender immediately and unconditionally, the order to fire will not be issued."

The phone of the President of the Tri-federation of North America buzzed softly. He picked it up, listened for a moment and smiled bleakly at the serious-faced men gathered about his desk. One by one they shook their heads and smiled bleakly back at him.

"Tell the old windbag to go to Hell," the President said.

"The answers seem to be substantially correct," Horace conceded grudgingly. He glanced at George almost in apology. "The first time since school started his margin of error has been negligible. The exception which proves the rule." He bent his gray sight-tubes at the youngster. "Now compute for me the *provable* planet whose

(Continued on page 117)



When the bells rang they would arise . . .

Under the new system of the Managerials, the fight was not for life but for death! And great was the ingenuity of—

The Victor

By Bryce Walton

Illustrated by Kelly Freas

CHARLES MARQUIS had a fraction of a minute in which to die. He dropped through the tubular beams of alloyed steel and hung there, five thousand feet above the tiers and walkways below. At either end of the walkway crossing between the two power-hung buildings, he saw the plainclothes security officers running in toward him.

He grinned and started to release his grip. He would think about them on the way down. His fingers wouldn't work. He kicked and strained and tore at himself with his own weight, but his hands weren't his own any more. He might have anticipated that. Some paralysis beam freezing his hands into the metal.

He sagged to limpness. His chin dropped. For an instant, then, the fire in his heart almost went out,

but not quite. It survived that one terrible moment of defeat, then burned higher. And perhaps something in that desperate resistance was the factor that kept it burning where it was thought no flame could burn. He felt the rigidity of paralysis leaving his arms as he was lifted, helped along the walkway to a security car.

The car looked like any other car. The officers appeared like all the other people in the clockwork culture of the mechanized New System. Marquis sought the protection of personal darkness behind closed eyelids as the monorail car moved faster and faster through the high clean air. Well—he'd worked with the Underground against the System for a long time. He had known that eventually he would be caught. There were rumors of what happened to men then, and even the

vaguest, unsubstantiated rumors were enough to indicate that death was preferable. That was the Underground's philosophy—better to die standing up as a man with some degree of personal integrity and freedom than to go on living as a conditioned slave of the state.

He'd missed—but he wasn't through yet though. In a hollow tooth was a capsule containing a very high-potency poison. A little of that would do the trick too. But he would have to wait for the right time . . .

THE MANAGER was thin, his face angular, and he matched up with the harsh steel angles of the desk and the big room somewhere in the Security Building. His face had a kind of emotion—cold, detached, cynically superior.

"We don't get many of your kind," he said. "Political prisoners are becoming more scarce all the time. As your number indicates. From now on, you'll be No. 5274."

He looked at some papers, then up at Marquis. "You evidently found out a great deal. However, none of it will do you or what remains of your Underground fools any good." The Manager studied Marquis with detached curiosity. "You learned things concerning the Managerials that have so far remained secret."

It was partly a question. Marquis' lean and darkly inscrutable face smiled slightly. "You're good at understatement. Yes—I found out what we've suspected for some time. That the Managerial class has found some way to stay young.

Either a remarkable longevity, or immortality. Of all the social evils that's the worst of all. To deny the people knowledge of such a secret."

The Manager nodded. "Then you did find that out? The Underground knows? Well, it will do no good."

"It will, eventually. They'll go on and someday they'll learn the secret." Marquis thought of Marden. Marden was as old as the New System of statism and inhumanity that had started off disguised as social-democracy. Three-hundred and three years old to be exact.

The Manager said. "No. 5274—you will be sent to the work colony on the Moon. You won't be back. We've tried re-conditioning rebels, but it doesn't work. A rebel has certain basic deviant characteristics and we can't overcome them sufficiently to make happy, well-adjusted workers out of you. However on the Moon—you will conform. It's a kind of social experiment there in associative reflex culture, you might say. You'll conform all right."

He was taken to a small, naked, gray-steel room. He thought about taking the capsule from his tooth now, but decided he might be observed. They would rush in an antidote and make him live. And he might not get a chance to take his life in any other way. He would try of course, but his knowledge of his future situation was vague—except that in it he would conform. There would be extreme conditioned-reflex therapeutic techniques. And it would be pretty horrible. That was all he knew.

He didn't see the pellet fall. He

heard the slight sound it made and then saw the almost colorless gas hissing softly, clouding the room. He tasted nothing, smelled or felt nothing.

He passed out quickly and painlessly.

HE WAS marched into another office, and he knew he was on the Moon. The far wall was spherical and was made up of the outer shell of the pressure dome which kept out the frigid cold nights and furnace-hot days. It was opaque and Marquis could see the harsh black and white shadows out there—the metallic edges of the far crater wall.

This Manager was somewhat fat, with a round pink face and cold blue eyes. He sat behind a chrome shelf of odd shape suspended from the ceiling with silver wires.

The Manager said. "No. 5274, here there is only work. At first, of course, you will rebel. Later you will work, and finally there will be nothing else. Things here are rigidly scheduled, and you will learn the routines as the conditioning bells acquaint you with them. We are completely self-sufficient here. We are developing the perfect scientifically-controlled society. It is a kind of experiment. A closed system to test to what extremes we can carry our mastery of associative reflex to bring man security and happiness and freedom from responsibility."

Marquis didn't say anything. There was nothing to say. He knew he couldn't get away with trying to kill this particular Managerial specimen. But one man, alone, a

rebel, with something left in him that still burned, could beat the system. *He had to!*

"Our work here is specialized. During the indoctrination period you will do a very simple routine job in coordination with the cybernetics machines. There, the machines and the nervous system of the workers become slowly cooperative. Machine and man learn to work very intimately together. Later, after the indoctrination—because of your specialized knowledge of food-concentrate preparation—we will transfer you to the food-mart. The period of indoctrination varies in length with the individuals. You will be screened now and taken to the indoctrination ward. We probably won't be seeing one another again. The bells take care of everything here. The bells and the machines. There is never an error—never any mistakes. Machines do not make mistakes."

He was marched out of there and through a series of rooms. He was taken in by generators, huge oscilloscopes. Spun like a living tube through curtains of vacuum tube voltmeters, electronic power panels. Twisted and squeezed through rolls of skeins of hook-up wire. Bent through shieldings of every color, size and shape. Rolled over panel plates, huge racks of glowing tubes, elaborate transceivers. Tumbled down long surfaces of gleaming bakelite. Plunged through color-indexed files of resistors and capacitances. . .

. . . here machine and man learn to work very intimately together.

As he drifted through the machine tooled nightmare, Marquis

knew *what* he had been fighting all his life, what he would continue to fight with every grain of ingenuity. Mechanization—the horror of losing one's identity and becoming part of an assembly line.

He could hear a clicking sound as tubes sharpened and faded in intensity. The clicking—rhythm, a hypnotic rhythm like the beating of his own heart—the throbbing and thrumming, the contracting and expanding, the pulsing and pounding. . .

. . . the machines and the nervous system of the workers become slowly cooperative.

Beds were spaced ten feet apart down both sides of a long gray metal hall. There were no cells, no privacy, nothing but beds and the gray metalene suits with numbers printed across the chest.

His bed, with his number printed above it, was indicated to him, and the guard disappeared. He was alone. It was absolutely silent. On his right a woman lay on a bed. No. 329. She had been here a long time. She appeared dead. Her breasts rose and fell with a peculiarly steady rhythm, and seemed to be coordinated with the silent, invisible throbbing of the metal walls. She might have been attractive once. Here it didn't make any difference. Her face was gray, like metal. Her hair was cropped short. Her uniform was the same as the man's on Marquis' left.

The man was No. 4901. He hadn't been here so long. His face was thin and gray. His hair was dark, and he was about the same size and build as Marquis. His

mouth hung slightly open and his eyes were closed and there was a slight quivering at the ends of the fingers which were laced across his stomach.

"Hello," Marquis said. The man shivered, then opened dull eyes and looked up at Marquis. "I just got in. Name's Charles Marquis."

The man blinked. "I'm—I'm—No. 4901." He looked down at his chest, repeated the number. His fingers shook a little as he touched his lips.

Marquis said. "What's this indoctrination?"

"You—learn. The bells ring—you forget—and learn—"

"There's absolutely no chance of escaping?" Marquis whispered, more to himself than to 4901.

"Only by dying," 4901 shivered. His eyes rolled crazily, then he turned over and buried his face in his arms.

The situation had twisted all the old accepted values squarely around. Preferring death over life. But not because of any anti-life attitude, or pessimism, or defeatism. None of those negative attitudes that would have made the will-to-die abnormal under conditions in which there would have been hope and some faint chance of a bearable future. Here to keep on living was a final form of de-humanized indignity, of humiliation, of ignominy, of the worst thing of all—loss of one's-self—of one's individuality. To die as a human being was much more preferable over continuing to live as something else—something neither human or machine, but something of both, with none of the dignity of either.

THE SCREENING process hadn't detected the capsule of poison in Marquis' tooth. The capsule contained ten grains of poison, only one of which was enough to bring a painless death within sixteen hours or so. That was his ace in the hole, and he waited only for the best time to use it.

Bells rang. The prisoners jumped from their beds and went through a few minutes of calisthenics. Other bells rang and a tray of small tins of food-concentrates appeared out of a slit in the wall by each bed. More bells rang, different kinds of bells, some deep and brazen, others high and shrill. And the prisoners marched off to specialized jobs co-operating with various machines.

You slept eight hours. Calisthenics five minutes. Eating ten minutes. Relaxation to the tune of musical bells, ten minutes. Work period eight hours. Repeat. That was all of life, and after a while Marquis knew, a man would not be aware of time, nor of his name, nor that he had once been human.

Marquis felt deep lancing pain as he tried to resist the bells. Each time the bells rang and a prisoner didn't respond properly, invisible rays of needle pain punched and kept punching until he reacted properly.

And finally he did as the bells told him to do. Finally he forgot that things had ever been any other way.

Marquis sat on his bed, eating, while the bells of eating rang across the bowed heads in the gray uniforms. He stared at the girl, then at the man, 4901. There were many opportunities to take one's own life

here. That had perplexed him from the start—*why hasn't the girl, and this man, succeeded in dying?*

And all the others? They were comparatively new here, all these in this indoctrination ward. Why weren't they trying to leave in the only dignified way of escape left?

No. 4901 tried to talk, he tried hard to remember things. Sometimes memory would break through and bring him pictures of other times, of happenings on Earth, of a girl he had known, of times when he was a child. But only the mildest and softest kind of recollections. . .

Marquis said. "I don't think there's a prisoner here who doesn't want to escape, and death is the only way out for us. We know that."

For an instant, No. 4901 stopped eating. A spoonful of food concentrate hung suspended between his mouth and the shelf. Then the food moved again to the urging of the bells. Invisible pain needles gouged Marquis' neck, and he ate again too, automatically, talking between tasteless bites. "A man's life at least is his own," Marquis said. "They can take everything else. But a man certainly has a right and a duty to take that life if by so doing he can retain his integrity as a human being. Suicide—"

No. 4901 bent forward. He groaned, mumbled "Don't—don't—" several times, then curled forward and lay on the floor knotted up into a twitching ball.

The eating period was over. The lights went off. Bells sounded for relaxation. Then the sleep bells began ringing, filling up the absolute darkness.

Marquis lay there in the dark and he was afraid. He had the poison. He had the will. But he couldn't be unique in that respect. What was the matter with the others? All right, the devil with them. Maybe they'd been broken too soon to act. He could act. Tomorrow, during the work period, he would take a grain of the poison. Put the capsule back in the tooth. The poison would work slowly, painlessly, paralyzing the nervous system; finally the heart. Sometime during the beginning of the next sleep period he would be dead. That would leave six or seven hours of darkness and isolation for him to remain dead, so they couldn't get to him in time to bring him back.

He mentioned suicide to the girl during the next work period. She moaned a little and curled up like a foetus on the floor. After an hour, she got up and began inserting punch cards into the big machine again. She avoided Marquis.

Marquis looked around, went into a corner with his back to the room, slipped the capsule out and let one of the tiny, almost invisible grains, melt on his tongue. He replaced the capsule and returned to the machine. A quiet but exciting triumph made the remainder of the work period more bearable.

Back on his bed, he drifted into sleep, into what he knew was the final sleep. He was more fortunate than the others. Within an hour he would be dead.

higher. A human body, somewhere . . . pain unimaginable twisting up through clouds of belching steam . . . muscles quivering, nerves twitching . . . and somewhere a body floating and bobbing and crying . . . sheets of agony sweeping and returning in waves and the horror of unescapable pain expanding like a volcano of madness. . .

Somewhere was someone alive who should be dead.

And then in the dark, in absolute silence, Marquis moved a little. He realized, vaguely, that the screaming voice was his own.

He stared into the steamy darkness and slowly, carefully, wet his lips. He moved. He felt his lips moving and the whisper sounding loud in the dark.

I'm alive!

He managed to struggle up out of the bed. He could scarcely remain erect. Every muscle in his body seemed to quiver. He longed to slip down into the darkness and escape into endless sleep. But he'd tried that. And he was still alive. He didn't know how much time had passed. He was sure of the poison's effects, but he wasn't dead. They had gotten to him in time.

Sweat exploded from his body. He tried to remember more. Pain. He lay down again. He writhed and perspired on the bed as his tortured mind built grotesque fantasies out of fragments of broken memory.

The routine of the unceasing bells went on. Bells, leap up. Bells, calisthenics. Bells, eat. Bells, march. Bells, work. He tried to shut out the bells. He tried to talk to 4901. 4901 covered up his ears and wouldn't listen. The girl wouldn't

SOMEWHERE, someone was screaming.

The sounds rose higher and

listen to him.

There were other ways. And he kept the poison hidden in the capsule in his hollow tooth. He had been counting the steps covering the length of the hall, then the twenty steps to the left, then to the right to where the narrow corridor led again to the left where he had seen the air-lock.

After the bells stopped ringing and the darkness was all around him, he got up. He counted off the steps. No guards, no alarms, nothing to stop him. They depended on the conditioners to take care of everything. This time he would do it. This time they wouldn't bring him back.

No one else could even talk with him about it, even though he knew they all wanted to escape. Some part of them still wanted to, but they couldn't. So it was up to him. He stopped against the smooth, opaque, up-curving glasite dome. It had a brittle bright shine that reflected from the Moon's surface. It was night out there, with an odd metallic reflection of Earthlight against the naked crags.

He hesitated. He could feel the intense and terrible cold, the airlessness out there fingering hungrily, reaching and whispering and waiting.

He turned the wheel. The door opened. He entered the air-lock and shut the first door when the air-pressure was right. He turned the other wheel and the outer lock door swung outward. The out-rushing air spun him outward like a balloon into the awful airless cold and naked silence.

His body sank down into the

thick pumice dust that drifted up around him in a fine powdery blanket of concealment. He felt no pain. The cold airlessness dissolved around him in deepening darkening pleasantness. This time he was dead, thoroughly and finally and gloriously dead, even buried, and they couldn't find him. And even if they did finally find him, what good would it do them?

Some transcendental part of him seemed to remain to observe and triumph over his victory. This time he was dead to stay.

This time he knew at once that the twisting body in the steaming pain, the distorted face, the screams rising and rising were all Charles Marquis.

Maybe a dream though, he thought. So much pain, so much screaming pain, is not real. In some fraction of a fraction of that interim between life and death, one could dream of so much because dreams are timeless.

Yet he found himself anticipating, even through the shredded, dissociated, nameless kind of pain, a repetition of that other time.

The awful bitterness of defeat.

HHE OPENED his eyes slowly. It was dark, the same darkness. He was on the same bed. And the old familiar dark around and the familiar soundlessness that was now heavier than the most thunderous sound.

Everything around him then seemed to whirl up and go down in a crash. He rolled over to the floor and lay there, his hot face cooled

by the cold metal.

As before, some undeterminable interim of time had passed. And he knew he was alive. His body was stiff. He ached. There was a drumming in his head, and then a ringing in his ears as he tried to get up, managed to drag himself to an unsteady stance against the wall. He felt now an icy surety of horror that carried him out to a pin-point in space.

A terrible fatigue hit him. He fell back onto the bed. He lay there trying to figure out how he could be alive.

He finally slept pushed into it by sheer and utter exhaustion. The bells called him awake. The bells started him off again. He tried to talk again to 4901. They avoided him, all of them. But they weren't really alive any more. How long could he maintain some part of himself that he knew definitely was Charles Marquis?

He began a ritual, a routine divorced from that to which all those being indoctrinated were subjected. It was a little private routine of his own. Dying, and then finding that he was not dead.

He tried it many ways. He took more grains of the poison. But he was always alive again.

"You—4901! Damn you—talk to me! You know what's been happening to me?"

The man nodded quickly over his little canisters of food-concentrate.

"This indoctrination—you, the girl—you went crazy when I talked about dying—what—?"

The man yelled hoarsely. "Don't . . . don't say it! All this—what you've been going through, can't

you understand? All that is part of indoctrination. You're no different than the rest of us! We've all had it! All of us. All of us! Some more maybe than others. It had to end. You'll have to give in. Oh God, I wish you didn't. I wish you could win. But you're no smarter than the rest of us. *You'll have to give in!*"

It was 4901's longest and most coherent speech. Maybe I can get somewhere with him, Marquis thought. I can find out something.

But 4901 wouldn't say any more. Marquis kept on trying. No one, he knew, would ever realize what that meant—to keep on trying to die when no could would let you, when you kept dying, and then kept waking up again, and you weren't dead. No one could ever understand the pain that went between the dying and the living. And even Marquis couldn't remember it afterward. He only knew how painful it had been. And knowing that made each attempt a little harder for Marquis.

He tried the poison again. There was the big stamping machine that had crushed him beyond any semblance of a human being, but he had awakened, alive again, whole again. There was the time he grabbed the power cable and felt himself, in one blinding flash, conquer life in a burst of flame. He slashed his wrists at the beginning of a number of sleep periods.

When he awakened, he was whole again. There wasn't even a scar.

He suffered the pain of resisting the eating bells until he was so weak he couldn't respond, and he knew that he died that time too—from

pure starvation.

But I can't stay dead!

"... You'll have to give in!"

HE DIDN'T know when it was. He had no idea now how long he had been here. But a guard appeared, a cold-faced man who guided Marquis back to the office where the fat, pink-faced little Manager waited for him behind the shelf suspended by silver wires from the ceiling.

The Manager said. "You are the most remarkable prisoner we've ever had here. There probably will not be another like you here again."

Marquis' features hung slack, his mouth slightly open, his lower lip drooping. He knew how he looked. He knew how near he was to cracking completely, becoming a senseless puppet of the bells. "Why is that?" he whispered.

"You've tried repeatedly to—you know what I mean of course. You have kept on attempting this impossible thing, attempted it more times than anyone else here ever has! Frankly, we didn't think any human psyche had the stuff to try it that many times—to resist that long."

The Manager made a curious lengthened survey of Marquis' face. "Soon you'll be thoroughly indoctrinated. You are, for all practical purposes, now. You'll work automatically then, to the bells, and think very little about it at all, except in a few stereotyped ways to keep your brain and nervous system active enough to carry out simple specialized work duties. Or while the New System lasts. And I im-

agine that will be forever."

"Forever . . ."

"Yes, yes. You're immortal now," the Manager smiled. "Surely, after all this harrowing indoctrination experience, you realize that!"

Immortal. I might have guessed I might laugh now, but I can't. We who pretend to live in a hell that is worse than death, and you, the Managerials who live in paradise. We two are immortal.

"That is, you're immortal as long as we desire you to be. You'll never grow any older than we want you to, never so senile as to threaten efficiency. That was what you were so interested in finding out on Earth, wasn't it? The mystery behind the Managerials? Why they never seemed to grow old. Why we have all the advantage, no senility, no weakening, the advantage of accumulative experience without the necessity of re-learning?"

"Yes," Marquis whispered.

The Manager leaned back. He lit a cigarette and let the soothing nerve- tonic seep into his lungs. He explained.

"Every one of you political prisoners we bring here want, above everything else, to die. It was a challenge to our experimental social order here. We have no objection to your killing yourself. We have learned that even the will to die can be conditioned out of the most determined rebel. As it has been conditioned out of you. You try to die enough times, and you do die, but the pain of resurrection is so great that finally it is impossible not only to kill yourself, but even to think of attempting it.

Marquis couldn't say anything.

The memory called up by the mention of self-destruction rasped along his spine like chalk on a blackboard. He could feel the total-recall of sensation, the threatening bursts of pain. "No . . ." he whispered over and over. "No—please—no—"

The Manager said. "We won't mention it anymore. You'll never be able to try any overt act of self-destruction again."

The bright light from the ceiling lanced like splinters into the tender flesh of Marquis' eyeballs, danced about the base of his brain in reddened choleric circles. His face had drawn back so that his cheekbones stood out and his nose was beak-like. His irises became a bright painful blue in the reddened ovals of his eyes.

The Manager yawned as he finished explaining. "Each prisoner entering here has an identification punch-plate made of his unique electro-magnetic vibratory field. That's the secret of our immortality and yours. Like all matter, human difference is in the electro-magnetic, vibratory rates. We have these punch-plates on file for every prisoner. We have one of you. Any dead human body we merely put in a tank which dissolves it into separate cells, a mass of stasis with potentiality to be reformed into any type of human being of which we have an identification punch-plate, you see? This tank of dissociated cells is surrounded by an electro-magnetic field induced from a machine by one of the identification punch-plates. That particular human being lives again, the body, its mind, its life pattern identical to that from which the original punch-plate was

made. Each time you have died, we reduced your body, regardless of its condition, to dissociated cells in the tank. The identification punch-plate was put in the machine. Your unique electro-magnetic field reformed the cells into you. It could only be you, as you are now. From those cells we can resurrect any one of whom we have an identification plate.

"That is all, No. 5274. Now that you're indoctrinated, you will work from now on in the food-mart, because of your experience.

FOR AN undeterminable length of time, he followed the routines of the bells. In the big food-mart, among the hydroponic beds, and the canning machines; among the food-grinders and little belts that dropped cans of food-concentrate into racks and sent them off into the walls.

He managed to talk more and more coherently with No. 4901. He stopped referring to suicide, but if anyone had the idea that Marquis had given up the idea of dying, they were wrong. Marquis was stubborn. Somewhere in him the flame still burned. He wouldn't let it go out. The bells couldn't put it out. The throbbing machines couldn't put it out. And now he had at last figured out a way to beat the game.

During an eating period, Marquis said to 4901. "You want to die. Wait a minute—I'm talking about something we can both talk and think about. A murder agreement. You understand? We haven't been conditioned against killing each other. It's only an overt act of self-

des—all right, we don't think about that. But we can plan a way to kill each other."

4901 looked up. He stopped eating momentarily. He was interested. "What's the use though?" Pain shadowed his face. "We only go through it—come back again—"

"I have a plan. The way I have it worked out, they'll never bring either one of us back."

That wasn't exactly true. *One* of them would have to come back. Marquis hoped that 4901 wouldn't catch on to the fact that he would have to be resurrected, but that Marquis never would. He hoped that 4901's mind was too foggy and dull to see through the complex plan. And that was the way it worked.

Marquis explained. 4901 listened and smiled. It was the first time Marquis had ever seen a prisoner smile.

He left what remained of the capsule of poison where 4901 could get it. During one of the next four eating periods, 4901 was to slip the poison into Marquis' food can. Marquis wouldn't know what meal, or what can. He had to eat. The bells had conditioned him that much. And not to eat would be an overt act of self-destruction.

He wasn't conditioned not to accept death administered by another.

And then, after an eating period, 4901 whispered to him. "You're poisoned. It was in one of the cans you just ate."

"Great!" almost shouted Marquis. "All right. Now I'll die by the end of the next work period. That gives us this sleep period and all the next work period. During that time

I'll dispose of you as I've said."

4901 went to his bed and the bells rang and the dark came and both of them slept.

NUMBER 4901 resisted the conditions enough to follow Marquis past his regular work room into the food-mart. As planned, 4901 marched on and stood in the steaming shadows behind the hydroponic beds.

Marquis worked for a while at the canning machines, at the big grinding vats. Then he went over to 4901 and said. "Turn around now."

4901 smiled. He turned around. "Good luck," he said. "Good luck—to you!"

Marquis hit 4901 across the back of the neck with an alloy bar and killed him instantly. He changed clothes with the dead man. He put his own clothes in a refuse incinerator. Quickly, he dragged the body over and tossed it into one of the food-grinding vats. His head bobbed up above the gray swirling liquid once, then the body disappeared entirely, was ground finely and mixed with the other foodstuff.

Within eight hours the cells of 4901 would be distributed minutely throughout the contents of thousands of cans of food-concentrate. Within that time much of it would have been consumed by the inmates and Managers.

At the end of that work period, Marquis returned to his cell. He went past his own bed and stopped in front of 4901's bed.

The sleep bells sounded and the dark came again. This would be

the final dark, Marquis knew. This time he had beat the game. The delayed-action poison would kill him. He had on 4901's clothes with his identification number. He was on 4901's bed.

He would die— as 4901. The guards would finally check on the missing man in the food-mart. But they would never find him. They would find 4901 dead, a suicide. And they would put the body labeled 4901 in the tank, dissolve it into dissociated cells and they would subject those cells to the electro-magnetic field of 4901.

And they would resurrect— 4901.

Not only have I managed to die, Marquis thought, but I've managed the ultimate suicide. There won't even be a body, no sign anywhere that I have ever been at all. Even my cells will have been resurrected as someone else. As a number 4901.

"And that's the way it was," No. 4901 would tell new prisoners coming in. Sometimes they listened to him and seemed interested, but the interest always died during indoctrination. But No. 4901's interest in the story never died.

He knew that now he could never let himself die as a human being either, that he could never let himself become completely controlled by the bells. He'd been nearly dead as an individual, but No. 5274 had saved him from that dead-alive anonymity. He could keep alive, and maintain hope now by remembering what 5274 had done. He clung to that memory. As long as he retained that memory of

hope—of triumph—at least some part of him would keep burning, as something had kept on burning within the heart of 5274.

So every night before the sleep bells sounded, he would go over the whole thing in minute detail, remembering 5274's every word and gesture, the details of his appearance. He told the plan over to himself every night, and told everyone about it who came in to the indoctrination ward.

Swimming up through the pain of resurrection, he had been a little mad at 5274 at first, and then he had realized that at least the plan had enabled one man to beat the game.

"He will always be alive to me. Maybe, in a way, he's part of me. Nobody knows. But his memory will live. He succeeded in a kind of ultimate dying— no trace of him anywhere. But the memory of him and what he did will be alive when the New System and the Managers are dead. That spirit will assure the Underground of victory—someday. And meanwhile, I'll keep 5274 alive.

"He even knew the psychology of these Managers and their System. That they can't afford to make an error. He knew they'd still have that identification punch-plate of him. That they would have one more plate than they had prisoners. But he anticipated what they would do there too. To admit there was one more identification plate than there were prisoners would be to admit a gross error. Of course they could dissolve one of the other prisoners and use 5274's plate and

(Continued on page 118)

*Women of earth had finally attained their objective: a new world all their own and—without men!
But was it?*

Thy Name Is

WOMAN

By Kenneth O'Hara

Illustrated by Zimmerman

AFTER THE Doctor gave him the hypo and left the ship, Bowren lay in absolute darkness wondering when the change would start. There would be pain, the Doctor had said. "Then you won't be aware of anything—anything at all."

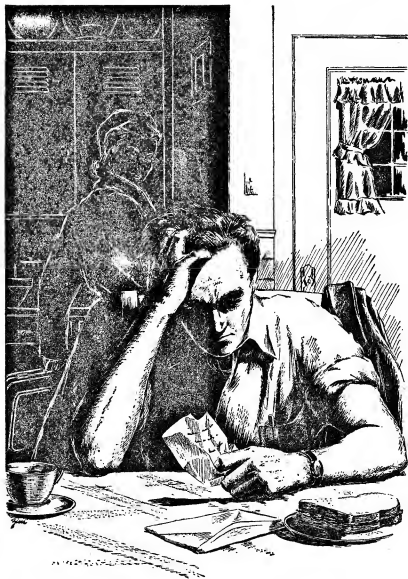
That was a devil of a thing, Bowren thought, not to be aware of the greatest adventure any man ever had. He, Eddie Bowren, the first to escape the Earth into space, the first man to Mars!

He was on his back in a small square steel cubicle, a secretly constructed room in the wall of the cargo bin of the big spaceship cradled at the New Chicago Port. He was not without fear. But be-

fore the ship blasted he wouldn't care—he would be changed by then. He would start turning any minute now, becoming something else; he didn't know exactly what, but that wouldn't matter. After it was over, he wouldn't remember because the higher brain centers, the cortex, the analytical mind, would be completely cut off, short-circuited, during the alteration.

The cubicle was close, hot, sound-proofed, like a tomb. "You will probably make loud unpleasant noises," the Doctor had said, "but no one will hear you." Don't worry about anything until you get to Mars."

That was right, Bowren thought. My only problem is to observe, com-



There wasn't a woman left on earth. They had just packed their bags and left.

pute, and get back into this dungeon without being observed, and back to Earth.

The idea was to keep it from the women. The women wouldn't go for this at all. They would object. The women would be able to bring into effect several laws dealing with spaceflight, among them the one against stowaways, and especially that particular one about aberrated males sneaking into space and committing suicide.

A lot of men had tried it, in the beginning. Some of them had managed it, but they had all died. For a long time, the men's cgos hadn't been able to admit that the male organism was incapable of standing the rigors of acceleration. Women had had laws passed, and if the women caught him doing this, the punishment would be extreme for him, personally, and a lot more extreme for Earth civilization in general. If you could call it a civilization. You could call it anything, Bowren groaned—but it didn't make sense. A world without women. A birthrate reduced to zero.

A trickle of sweat slid past Bowren's eyes, loosening a nervous flush along his back that prickled painfully. His throat was tense and his heart pounded loud in the hot dark.

A sharp pain ran up his body and exploded in his head. He tried to swallow, but something gagged in his throat. He was afraid of retching. He lay with his mouth open, spittle dribbling over his lips. The pain returned, hammered at his entrails. He fought the pain numbly, like a man grappling in the dark.

The wave subsided and he lay there gasping, his fists clenched.

"The pain will come in increasingly powerful waves," the Doctor had said. "At a certain point, it will be so great, the analytical mind will completely short-circuit. It will stay that way enroute to Mars, and meanwhile your body will rapidly change into that of a beast. Don't worry about it. A catalytic agent will return you to normal before you reach the planet. If you live, you'll be human again."

A male human couldn't stand the acceleration. But a woman could. Animals could. They had experimented on human males and animals in the giant centrifuges, and learned what to do. Animals could stand 25 "G" consistently, or centrifugal forces as high as 120 revolutions a minute. About 10 "G" was the limit of female endurance. Less for men.

It had never been thoroughly determined why women had been able to stand higher acceleration. But human females had the same physical advantages over men as female rats, rabbits, and cats over males of the same species. A woman's cellular structure was different; her center of gravity was different, the brain waves given off during acceleration were different. It was suspected that the autonomic nervous system in women could function more freely to protect the body during emergency situations. The only certainty about it was that no man had ever been able to get into space and live.

But animals could so they had worked on it and finally they decided to change a man into an animal, at least temporarily. Geneti-

ent and biochemists and other specialists had been able to do a lot with hormones and hard radiation treatment. Especially with hormones. You could shoot a man full of some fluid or another, and do almost anything to his organism. You could induce atavism, regression to some lower form of animal life—a highly speeded up regression. When you did that, naturally the analytical mind, the higher thought centers of a more recent evolutionary development, blanked out and the primal mind took over. The body changed too, considerably.

Bowren was changing. Then the pain came and he couldn't think. He felt his mind cringing—giving way before the onslaught of the pain. Dimly he could feel the agony in his limbs, the throbbing of his heart, the fading power of reason.

He retched, languished through flaccid minutes. There were recurring spasms of shivering as he rolled his thickened tongue in the arid cavity of his mouth. And then, somewhere, a spark exploded, and drowned him in a pool of streaming flame.

CONSCIOUSNESS returned slowly—much as it had gone—in waves of pain. It took a long time. Elements of reason and unreason fusing through distorted nightmares until he was lying there able to remember, able to wonder, able to think.

Inside the tiny compartment were supplies. A hypo, glucose, a durolene suit neatly folded which he put on. He gave himself a needle, swallowed the tablets, and

waited until energy and a sense of well-being gave him some degree of confidence.

It was very still. The ship would be cradled on Mars now. He lay there, relaxing, preparing for the real challenge. He thought of how well the Earth Investigation Committee had planned the whole thing.

The last desperate attempt of man to get into space—to Mars—a woman's world. At least it was supposed to be. Whatever it was, it wasn't a man's world.

The women didn't want Earth anymore. They had something better. But what? There were other questions, and Bowren's job was to find the answers, remain unobserved and get back aboard this ship. He would then hypo himself again, and when the ship blasted off to Earth, he would go through the same transition all over again.

He put on the soft-soled shoes as well as the durolene suit and crawled through the small panel into the big cargo bin. It was empty. Only a dim yellow light shone on the big cargo vices along the curved walls.

He climbed the ladders slowly, cautiously, through a gnawing silence of suspense, over the mesh grid flooring along the tubular corridors. He wondered what he would find.

Could the women have been influenced by some alien life form on Mars?

That could explain the fact that women had divorced themselves completely from all men, from the Earth. Something had to explain it.

There was one other possibility. That the women had found human life on Mars. That was a very remote possibility based on the idea that perhaps the Solar system had been settled by human beings from outer space, and had landed on two worlds at least.

Bowren remembered how his wife, Lora, had told him he was an idiot and a bore, and had walked out on him five years before; taken her three months course in astrology, and left Earth. He hadn't heard of her or from her since. It was the same with every other man, married or not. The male ego had taken a beating for so long that the results had been psychologically devastating.

The ship seemed to be empty of any human being but Bowren. He reached the outer lock door. It was ajar. Thin cold air came through and sent a chill down his arms, tingling in his fingers. He looked out. It was night on Mars, a strange red-tinted night, the double moons throwing streaming color over the land.

Across the field, he saw the glowing Luciferin-like light of a small city. Soaring spherical lines. Nothing masculine about its architecture. Bowren shivered.

He climbed down the ladder, the air biting into his lungs. The silence down there on the ground under the ship was intense.

He stood there a minute. The first man on Mars. Man's oldest dream realized.

But the great thrill he had anticipated was dulled somewhat by fear. A fear of what the women had become, and of what might have in-

fluenced their becoming.

He took out a small neurogun and walked. He reached what seemed to be a huge park that seemed to surround the city. It grew warmer and a soft wind whispered through the strange wide-spreading trees and bushes and exotic blossoms. The scent of blossoms drifted on the wind and the sound of running water, of murmuring voices.

The park thickened as Bowren edged into its dark, languid depth. It seemed as though the city radiated heat. He dodged suddenly behind a tree, knelt down. For an instant he was embarrassed seeing the two shadowy figures in each others arms on a bench in the moonlight. This emotion gave way to shock, anger, fear.

One of them was a—man!

Bowren felt the perspiration start from his face. An intense jealousy surrendered to a start of fearful curiosity. Where had the man come from?

Bowren's long frustration, the memory of his wife, the humiliation, the rejection, the abandonment, the impotent rage of loneliness—it all came back to him.

He controlled his emotion somehow. At least he didn't manifest it physically. He crept closer, listened.

"This was such a sweet idea," the woman was whispering. "Bringing me here to the park tonight. That's why I love you so, Marvin. You're always so romantic."

"How else could I think of you, darling," the man said. His voice was cultured, precise, soft, thick with emotion.

"You're so sweet, Marvin."

"You're so beautiful, darling. I think of you every minute that you're away on one of those space flights. You women are so wonderful to have conquered space, but sometimes I hate the ships that take you away from me."

The woman sighed. "But it's so nice to come back to you. So exciting, so comfortable."

The kiss was long and deep. Bowren backed away, almost smashing into the tree. He touched his forehead. He was sweating heavily. His beard dripped moisture. There was a hollow panicky feeling in his stomach. Now he was confused as well as afraid.

Another couple was sitting next to a fountain, and a bubbling brook ran past them, singing into the darkness. Bowren crouched behind a bush and listened. It might have been the man he had just left, still talking. The voice was slightly different, but the dialogue sounded very much the same.

"It must be wonderful to be a woman, dear, and voyage between the stars. But as I say, I'm glad to stay here and tend the home and mind the children, glad to be here, my arms open to you when you come back."

"It's so wonderful to know that you care so much. I'm so glad you never let me forget that you love me."

"I love you, every minute of every day. Just think—two more months and one week and we will have been married ten years."

"It's so lovely," she said. "It seems like ten days. Like those first thrilling ten days, darling, going

over and over again."

"I'll always love you, darling."

"Always?"

"Always."

The man got up, lifted the woman in his arms, held her high. "Darling, let's go for a night ride across the desert."

"Oh, you darling. You always think of these little adventures."

"All life with you is an adventure."

"But what about little Jimmie and Janice?"

"I've arranged a sitter for them."

"But darling—you mean you—Oh, you're so wonderful. You think of everything. So practical, yet so romantic . . . so—"

He kissed her and ran away, holding her high in the air, and her laughter bubbled back to where Bowren crouched behind the bush. He kept on crouching there, staring numbly at the vacancy the fleeing couple had left in the shadows. "Good God," he whispered. "After ten years—"

He shook his head and slowly licked his lips. He'd been married five years.

It hadn't been like this. He'd never heard of any marriage maintaining such a crazy high romantic level of manic neuroticism as this for very long. Of course the women had always expected it to. But the men—

And anyway—*where did the men come from?*

BOWREN moved down a winding lane between exotic blossoms, through air saturated with the damp scent of night-blooming

flowers. He walked cautiously enough, but in a kind of daze, his mind spinning. The appearance of those men remained in his mind. When he closed his eyes for a moment, he could see them.

Perfectly groomed, impeccably dressed, smiling, vital, bronzed-skinned, delicate, yet strong features; the kind of male who might be considered, Bowren thought, to be able to assert just the right degree of aggressiveness without being indelicate.

Why, he thought, they've found perfect men, their type of men.

He dodged behind a tree. Here it was again. Same play, same scene practically, only the players were two other people. A couple standing arm in arm beside a big pool full of weird darting fish and throwing upward a subdued bluish light. Music drifted along the warm currents of air. The couple were silhouetted by the indirect light. The pose is perfect, he thought. The setting is perfect.

"You're so wonderful, darling," the man was saying, "and I get so lonely without you. I always see your face, hear your voice, no matter how long you're away."

"Do you? Do you?"

"Always. Your hair so red, so dark it seems black in certain lights. Your eyes so slanted, so dark a green they seem black usually too. Your nose so straight, the nostrils flaring slightly, the least bit too much sometimes. Your mouth so red and full. Your skin so smooth and dark. And you're ageless, darling. Being married to you five years, it's one exciting adventure."

"I love you so," she said. "You're

everything any woman could want in a husband. Simply everything, yet you're so modest with it all. I still remember how it used to be. Back there . . . with the other men I mean?"

"You should forget about *them*, my dear."

"I'm forgetting, slowly though. It may take a long time to forget completely. Oh, he was such an unpleasant person, so uninteresting after a while. So inconsiderate, so self-centered. He wasn't romantic at all. He never said he loved me, and when he kissed me it was mere routine. He never thought about anything but his work, and when he did come home at night, he would yell at me about not having ordered the right dinner from the cafeteria. He didn't care whether he used hair remover on his face in the mornings or not. He was surly and sullen and selfish. But I could have forgiven everything else if he had only told me every day that he loved me, that he could never love anyone else. The things that you do and say, darling."

"I love you," he said. "I love you, I love you. But please, let's not talk about *him* anymore. It simply horrifies me!"

Bowren felt the sudden sickening throbbing of his stomach. The description. Now the slight familiarity of voice. And then he heard the man say, murmuring, "Lois . . . darling Lois . . ."

Lois! LOIS!

Bowren shivered. His jawls darkened, his mouth pressed thin by the powerful clamp of his jaws. His body seemed to loosen all over and he fell into a crouch. Tiredness and

torn nerves and long-suppressed emotion throbbed in him, and all the rage and suppression and frustration came back in a wave. He yelled. It was more of a sound, a harsh prolonged animal roar of pain and rage and humiliation.

"Lois . . ." He ran forward.

She gasped, sank away as Bowren hit the man, hard. The man sighed and gyrated swinging his arms, teetering and flipped backward into the pool among the lights and the weird fish. A spray of cold water struck Bowren, sobering him a little, sobered his burst of mindless passion enough that he could hear the shouts of alarm ringing through the trees. He turned desperately.

Lois cringed. He scarcely remembered her now, he realized. She was different. He had forgotten everything except an image that had changed with longing. She hadn't been too impressive anyway, maybe, or maybe she had. It didn't matter now.

He tried to run, tried to get away. He heard Lois' voice, high and shrill. Figures closed in around him. He fought, desperately. He put a few temporarily out of the way with the neurogun, but there were always more. Men, men everywhere. Hundreds of men where there should be no men at all. Well-groomed, strong, bronzed, ever-smiling men. It gave him intense pleasure to crack off a few of the smiles. To hurl the gun, smash with his fists.

Then the men were swarming all over him, the clean faces, the smiling fragrant men, and he went down under the weight of men.

He tried to move. A blow fell

hard and his head smashed against the rocks. He tried to rise up, and other blows beat him down and he was glad about the darkness, not because it relieved the pain, but because it curtained off the faces of men.

AFTER A TIME it was as though he was being carried through a dim half-consciousness, able to think, too tired to move or open his eyes. He remembered how the men of Earth had rationalized a long time, making a joke out of it. Laughing when they hadn't wanted to laugh, but to hate. It had never been humorous. It had been a war between the sexes, and the women had finally won, destroying the men psychologically, the race physically. Somehow they had managed to go on with a culture of their own.

The war between the sexes had never really been a joke. It had been deadly serious, right from the beginning of the militant feminist movements, long before the last big war. There had always been basic psychological and physiological differences. But woman had refused to admit this, and had tried to be the "equal" if not the better of men. For so long woman had made it strictly competitive, and in her subconscious mind she had regarded men as wonderful creatures, capable of practically anything, and that woman could do nothing better than to emulate them in every possible way. There was no such thing as a woman's role unless it had been the same as a man's. That had gone on a long time. And it hadn't been a joke at all.

How ironic it was, there at the last! All of man's work through the ages had been aimed at the stars. And the women had assumed the final phase of conquest!

For a long time women had been revolting against the masculine symbols, the levers, pistons, bombs, torpedoes and hammers, all manifestations of man's whole activity of overt, aggressive power.

The big H-bombs of the last great war had seemed to be man's final symbol, destructive. And after that, the spaceships, puncturing space, roaring outward, the ultimate masculine symbol of which men had dreamed for so long, and which women had envied.

And then only the women could stand the acceleration. It was a physiological fact. Nothing could change it. Nothing but what they had done to Bowren.

All of man's evolutionary struggle, and the women had assumed the climax, assumed all the past wrapped up in the end, usurped the effect, and thereby psychologically assuming also all the thousands of years of causation.

For being held down, being made neurotic by frustration and the impossibility of being the "equal" of men, because they were fundamentally psychologically and physiologically different, women had taken to space with an age-old vengeance. Personal ego salvation.

But they hadn't stopped there. What had they done? What about the men? A man for every woman, yet no men from Earth. That much Bowren knew. Native Martians? What?

He had been transported some-

where in a car of some kind. He didn't bother to be interested. He couldn't get away. He was held fast. He refused to open his eyes because he didn't want to see the men who held him, the men who had replaced him and every other man on Earth. The men who were destroying the civilization of Earth.

The gimmicks whereby the women had rejected Earth and left it to wither and die in neglect and bitter, bitter wonderment.

He was tired, very tired. The movement of the car lulled him, and he drifted into sleep.

He opened his eyes and slowly looked around. Pretty pastel ceiling. A big room, beautiful and softly furnished, with a marked absence of metal, of shiny chrome, of harshness or brittle angles. It was something of an office, too, with a desk that was not at all business-like, but still a desk. A warm glow suffused the room, and the air was pleasantly scented with natural smelling perfumes.

A woman stood in the middle of the room studying him with detached interest. She was beautiful, but in a hard, mature, withdrawn way. She was dark, her eyes large, liquid black and dominating her rather small sharply-sculptured face. Her mouth was large, deeply red. She had a strong mouth.

He looked at her a while. He felt only a deep, bitter resentment. He felt good though, physically. He had probably been given something, an injection. He sat up. Then he got to his feet.

She kept on studying him. "A change of clothes, dry detergent, and hair remover for your face are

in there, through that door," she said.

He said: "Right now I'd rather talk."

"But don't you want to take off that awful—beard?"

"The devil with it! Is that so important? It's natural isn't it for a man to have hair on his face? I like hair on my face."

She opened her mouth a little and stepped back a few steps.

"And anyway, what could be less important right now than the way I look?"

"I'm—I'm Gloria Munsel," she said hesitantly. "I'm President of the City here. And what is your name, please?"

"Eddie Bowren. What are you going to do with me?"

She shrugged. "You act like a mad man. I'd almost forgotten what you men of Earth were like. I was pretty young then. Well, frankly, I don't know what we're going to do with you. No precedent for the situation. No laws concerning it. It'll be up to the Council."

"It won't be pleasant for me," he said, "I can be safe in assuming that."

She shrugged again and crossed her arms. He managed to control his emotions somehow as he looked at the smooth lines of her body under the long clinging gown. She was so damn beautiful! A high proud body in a smooth pink gown, dark hair streaming back and shiny and soft.

IT WAS torture. It had been for a long time, for him, for all the others. "Let me out of here!" he

yelled harshly. "Put me in a room by myself!"

She moved closer to him and looked into his face. The fragrance of her hair, the warmth of her reached out to him. Somehow, he never knew how, he managed to grin. He felt the sweat running down his dirty, bearded, battered face. His suit was torn and dirty. He could smell himself, the stale sweat, the filth. He could feel his hair, shaggy and long, down his neck, over his ears.

Her lips were slightly parted, and wet, and she had a funny dark look in her eyes, he thought. She turned quickly as the door opened, and a man came in. He was only slightly taller than Gloria and he nodded, smiled brightly, bowed a little, moved forward. He carried a big bouquet of flowers and presented them to her.

She took the flowers, smiled, thanked him, and put them on the table. The man said. "So sorry, darling, to intrude. But I felt I had to see you for a few minutes. I left the children with John, and dashed right up here. I thought we might have lunch together."

"You're so thoughtful, dear," she said.

The man turned a distasteful look upon Bowren. He said. "My dear, what is *this*?"

"A man," she said, and then added. "From Earth."

"What? Good grief, you mean they've found a way—?"

"I don't know. You'd better go back home and tend the yard today, Dale. I'll tell you all about it when I come home this evening. All right?"

"Well I—oh, oh yes, of course, if you say so, darling."

"Thank you, dear." She kissed him and he bowed out.

She turned and walked back toward Bowren. "Tell me," she said. "How did you get here alive?"

Why not tell her? He was helpless here. They'd find out anyway, as soon as they got back to Earth on the cargo run. And even if they didn't find out, that wouldn't matter either. They would be on guard from now on. No man would do again what Bowren had done. The only chance would be to build secret spaceships of their own and every-time one blasted, have every member of the crew go through what Bowren had. It couldn't last. Too much injury and shock.

As he talked he studied the office, and he thought of other things. An office that was like a big beautiful living room. A thoroughly feminine office. Nor was it the type of office a woman would fix for a man. It was a woman's office. Everything, the whole culture here, was feminine. When he had finished she said. "Interesting. It must have been a very unpleasant experience for you."

He grinned. "I suffered. But even though I've failed, it's worth all the suffering, if you'll tell me—where did all the ah—men come from?"

She told him. It was, to say the least, startling, and then upon reflection, he realized how simple it all was. No aliens. No native Martians. A very simple and thoroughly logical solution, and in a way, typically feminine.

Hormone treatment and genetic

manipulation, plus a thorough re-conditioning while the treatment was taking place.

And the women had simply turned approximately half of their number into men!

She paused, then went on. "It was the only way we could see it, Mr. Bowren. Earth was a man's world, and we could never have belonged in it, not the way we wanted to. Men wouldn't stand it anyway, down there, having us going into space, usurping their masculine role. And anyway—you men of Earth had become so utterly unsatisfactory as companions, lovers, and husbands, that it was obvious nothing could ever be done about it. Not unless we set up our own culture, our own civilization, our way."

"But meanwhile we die down there," Bowren said. "Logic is nice. But mass murder, and the death of a whole world civilization seems pretty cold from where I'm standing. It's pathological, but it's too late to think about that. It's done now."

"But we're happy here," she said. "For the first time in a long, long time, we women feel like ourselves. We feel truly independent. The men around us are the kind of men we want, instead of us being what they want us to be, or even worse, the men being what we want them to be but resenting it and making life unbearable for both. All through the process of being changed into men, our women undergo such a thorough conditioning that they can never be anything else but model men in every sense. Their attitude as women with which they started

treatment helped. They knew what they wanted in men, and they became what we wanted them to be, as men."

"Very logical," Bowren said. "It smells to heaven it's so logical." It was purely impulse, what he did then. He couldn't help it. It wasn't logical either. It was emotional and he did it because he had to do it and because he didn't see any reason why he shouldn't.

He put his arm out suddenly, hooked her slim waist, and pulled her to him. Her face flushed and his eyes were very wide and dark as she looked up at him.

"Listen," he said. "The whole thing's insane. The lot of you are mad, and though I can't help it, I hate to see it happen this way. What kind of men are these? These smiling robots, these goons who are nothing else but reflections in a woman's mirror? Who'd want to be a man like that. Who would really want a man like that? And who would want a woman who was just what a man wanted her to be? Where's the fire? Where's the individuality? Where's the conflict, the fighting and snarling and raging that makes living. All this is apathy, this is death! You don't grow by being agreeable, but by conflict."

"What are you trying to sell now?" she whispered.

He laughed. It was wild sounding to him, not very humorous really, but still it was laughter. "Selling nothing, buying nothing." He pulled her closer and kissed her. Her lips parted slightly and he could feel the warmth of her and the quick drawing of breath. Then

she pushed him away. She raised her hand and brushed it over his face.

She shook her head slowly. "It feels rather interesting," she said, "your face. I've never felt a man's face before, that wasn't smooth, the way it should be."

He laughed again, more softly this time. "Why reform your men? You women always wanted to do that."

"We don't reform men here," she said. "We start them out right—from the beginning."

She backed away from him. She raised her hand to her face and her fingers touched her lips. Wrinkles appeared between her eyes and she shook her head again. Not at him, but at something, a thought perhaps, he couldn't tell.

Finally she said. "That was an inexcusable, boorish thing to do. A typical thoughtless egomaniacal Earth-male action if there ever was one. Our men are all perfect here, and in comparison to them, you're a pretty miserable specimen. I'm glad you showed up here. It's given me, and other women, a good chance for comparison. It makes our men seem so much better even than they were to us before."

He didn't say anything.

"Our men are perfect! Perfect you understand? What are you smiling about? Their character is good. They're excellent conversationalists, well informed, always attentive, moderate, sympathetic, interested in life, and always interested in us."

"And I suppose they are also—human?"

"This is nonsense," she said, her

voice rising slightly. "You will take that door out please. The Council will decide what's to be done with you."

He nodded, turned, and went through the door. There were two men there waiting for him. They were both blond, with light blue eyes, just medium height, perfectly constructed physically, perfectly groomed, impeccably dressed. They smiled at him. Their teeth had been brushed every morning. One of them wrinkled his nose, obviously as a reaction to Bowren. The other started to reach, seemed reluctant to touch him.

"Then don't touch me, brother," Bowren said. "Put a hand on me, and I'll slug you." The man reached away, and it gave Bowren an ecstatic sensation to send his fist against the man's jaw. It made a cracking sound and the man's head flopped back as his knees crumbled and he swung around and stretched out flat on his face on the long tubular corridor.

"Always remember your etiquette," Bowren said. "Keep your hands off people. It isn't polite."

The other man grunted something, still managing to smile, as he rushed at Bowren. Bowren sidestepped, hooked the man's neck in his arm and ran him across the hall and smashed his head into the wall.

He turned, opened the door into Munsel's office, dragged both of them in and shut the door again. He walked down the corridor several hundred feet before a woman appeared, in some kind of uniform, and said. "Will you come this way please?"

He said he would.

IT WAS a small room, comfortably furnished. Food came through a panel in the wall whenever he pressed the right button. A telescreen furnished entertainment when he pushed another button. Tasty mixed drinks responded to other buttons.

He never bothered to take advantage of the facilities offered for removing his beard, bathing, or changing clothes. Whatever fate was going to befall him, he would just as soon meet it as the only man on Mars who looked the part—according to Bowren's standards, at least—at least by comparison.

He thought of trying to escape. If he could get away from the city and into the Martian hills, he could die out there with some dignity. It was a good idea, but he knew it was impossible. At least so far, it was impossible. Maybe something would come up. An opportunity and he would take it. That was the only thing left for him.

He was in there for what seemed a long time. It was still, the light remaining always the same. He slept a number of times and ate several times. He did a lot of thinking too. He thought about the men on Earth and finally he decided it didn't matter much. They had brought it on themselves in a way, and if there was anything like cause and effect operating on such a scale, they deserved no sympathy. Man had expressed his aggressive male ego until he evolved the H-bombs and worse, and by then the whole world was neurotic with fear, including the women. Women had always looked into the mirror of the future (or lack of it), of the race,

and the more she had looked, the more the insecurity. The atomic wars had created a kind of final feeling of insecurity as far as men were concerned, forced them to become completely psychologically and physiologically self-sufficient. They had converted part of their own kind into men, their own kind of men, and theoretically there wouldn't be any more insecurity brought on by the kind of male psychology that had turned the Earth around for so long.

All right, drop it right there then, he thought. It's about all over. It's all over but the requiem. Sometime later he was in a mood where he didn't mind it when an impersonal face appeared on the screen and looked right at him and told him the Council's verdict. It was a woman, and her voice was cold, very cold.

"Mr. Eddie Bowren. The Council has reached a verdict regarding what is to be done with you. You are to be exterminated. It is painless and we will make it as pleasant as possible."

"Thanks," Bowren said. A woman's world was so polite, so mannerly, so remembering of all the social amenities. It would be so difficult after a while to know when anyone was speaking, or doing anything real. "Thanks," he said again. "I will do all in my power to make my extermination a matter of mutual pleasure." By now he was pretty drunk, had been drunk for some time. He raised his glass. "Here's to a real happy time of it, baby."

The screen faded. He sat there brooding, and he was still brooding when the door unlocked and opened

softly. He sat there and looked at Gloria Munsel for a while, wondering why she was here. Why she would look so provocative, so enchanting, so devastating, whatever other words you cared to dream up.

She moved toward him with a slight swaying motion that further disturbed him. He felt her long white fingers rubbing over the stiff wiry beard of his face. "I dreamed about the way that beard felt last night," she said. "Silly of me wasn't it? I heard of the way you smell, of the way you yelled at me, so impolitely. Why did I dream of it, I said this morning, so now I'm here to find out why."

"Get out and let me alone," Bowren yelled. "I'm going to be exterminated. So let me alone to my own company."

"Yes, I heard about that verdict," she said. She looked away from him. "I don't know why they made that choice. Well, I do in a way, they're afraid of you, your influence. It would be very disruptive socially. Several of our men—"

"It doesn't matter why," Bowren said. "What matters is that it will be as pleasant as possible. If you're going to kill a man, be nice about it."

She stared down at him. Chills rippled down his back as her warm soft fingers continued to stroke his bearded chin and throat. He got up. It was too uncomfortable and it was torture. He said, "Get out of here. Maybe I'm not a conformist, but I'm damn human!"

She backed away. "But—but what do you mean?"

He got up and put the flat of his hands cupping her shoulder blades.

Her eyes stared wildly, and her lips were wet and she was breathing heavily. He could see the vein pulsing faster in her slim throat. She had an exciting body.

He saw it then, the new slow smile that crept across her face. His left hand squirmed at the thick piled hair on her shoulders and he tugged and her face tilted further and he looked at the parted pouting lips. The palm of his right hand brushed her jaw and his fingers took her cheeks and brought her face over and he spread his mouth hard over her mouth. Her lips begged. Hammers started banging away in his stomach.

Music from the screen was playing a crescendo into his pulse. They swayed together to the music, her head thrown back, her eyes closed. She stepped back, dropped her arms limply at her sides. There was the clean sweet odor of her hair.

"I'd better go now," she whispered. "Before I do something that would result in my not being President anymore."

HE WIPED his face. Don't beg, he thought. The devil with her and the rest. A man could lose everything, all the women, not one, but all of them. He could live alone, a thousand miles from nowhere, at the North Pole like Amundsen, and it didn't matter. He could be killed pleasantly or unpleasantly, that didn't matter either. All that mattered was that he maintain some dignity, as a man.

He stood there, not saying anything. He managed to grin. Finally he said, "Goodbye, and may your

husband never say a harsh word to you or do anything objectionable as long as you both shall live, and may he love you every hour of every day, and may he drop dead."

She moved in again, put her arms around him. There were tears in her eyes. She placed her cheek on his shoulder. "I love you," she whispered. "I know that now."

He felt a little helpless. Tears, what could you do with a woman's tears?

She sobbed softly, talking brokenly. Maybe not to him, but to someone, somewhere. A memory, a shadow out of a long time back . . .

"Maybe it's . . . it's all a mistake after all . . . maybe it is." I've never been too sure, not for a while now. And then you—the way you talked and looked—the excitement. I don't know why. But the touch of your beard—your voice. I don't know what happened. We've carried it to extremes, extremes, Eddie. It was always this way with us—once we were sure of our man, and even before, when he was blinded by new love, we tried to make him over, closer to *our* idea of what was right. But now I know something . . . those faults and imperfections, most of them were men's, the real men's chief attractions. Individuality, that's the thing, Eddie, that's it after all. And it's imperfections too, maybe more than anything else. Imperfections . . . Oh, Eddie, you're close, much closer to human nature, to real vitality, through *your* imperfections. Not imperfections. Eddie—your beard is beautiful, your dirt is lovely, your yelling insults are wonderful—and . . ."

She stopped a minute. Her hands

ran through his hair. "When you get a man made over, he's never very nice after that, Eddie. Never—"

She sobbed, pulled his lips down. "Eddie—I can't let them kill you."

"Forget it," he said. "No one can do anything. Don't get yourself in a jam. You'll forget this in a little while. There's nothing here for a guy like me, and I'm not for you."

She stepped away, her hands still on his shoulders. "No—I didn't mean that. I've got to go on living in the world I helped make, among the men we all decided we would always want. I've got to do that. Listen, Eddie, how did you intend to get back to Earth?"

He told her.

"Then it's just a matter of getting back aboard that same ship, and into this secret room unobserved?"

"That's all, Gloria. That and keep from being exterminated first."

"I can get you out of here. We'll have to do it right now. Take that beard off, and get that hair smoothed down somehow. I hate to see it happen, but I've got to get you out of here, and the only way to do it is for you to be like one of the men here."

He went to work on his face and hair. She went out and returned with a suit like the other men wore. He got into it. She smiled at him, a hesitant and very soft smile, and she kissed him before they left the room and cautiously went out of the City.

The way was clear across the moonlit field and under the deep dark shadow of the ship. He kissed

her and then took hold of the ladder. She slipped a notebook of velonex, full of micro-film, into his hands. "Goodbye, Eddie," she said. "Take this with you. It may give you men down there a way out. I never thought much before of how mad it must be for you."

He took the folder. He looked up at the double moons painting the night a fantastic shifting wave of changing light. And then he looked down at Gloria Munsel again, at the glinting shine of her hair.

"Goodbye," he said. "I might stay after all—except that a lot of men on Earth are waiting for me to tell them something. They'll be surprised. I—" He hesitated. Her eyes widened. Warmth of emotion moved him and he said, or started to say, "I love you," and many other things, but she interrupted him.

"Don't please, Eddie. Anything you said now would sound just like what my devoted husband says, every day. I'd rather you wouldn't say anything at all now, Eddie, just goodbye."

"Goodbye then," he said again.

He looked back from the opened door in the ship's cargo bin. Her face was shining up at him, her lips slightly parted, her cheeks wet. It was a picture he would never be able to forget, even if he wanted to.

"When you forget to shave in the mornings, Eddie, think of me."

BOWREN stood up and addressed the investigation committee which had sent him to Mars. He hadn't made any statements at all up to this moment. The ten members of the Committee sat there

behind the half-moon table. None of them moved. Their faces were anxious. Some of them were perspiration.

Eddie told them what he had seen, what he had heard, his own impressions about the whole thing, about his escape. He left out certain personal details that were, to him, unnecessary to this particular report.

The Committee sat there a while, then started to talk. They talked at once for a while, then the Chairman rapped for order and stood up. His face had an odd twist to it, and his bald head was pocked with perspiration.

Eddie Bowren took the book of micro-film from under his arm, the one Gloria Munsel had given him. He put it on the table. "That has been thoroughly checked by scientists, and their report is included. I thought it surely was a false report, until they checked it. The first page there gives a brief outline of what the micro-film contains."

The Chairman read, then looked up. He coughed. He mopped at his head.

Eddie said, "As I saw it up there, this is the way it's going to stay. We'll never get into space, not without using the methods that were used with me. And they're too destructive. I've been examined. I could never go through it again and live. And that's the only way Earth men can ever get into space. The women aren't coming back to us. They have husbands of their own now. Believe me, those women aren't going to leave their perfect

husbands. They've set up a completely feminine culture. It's theirs, all theirs. They'll never give it up to return to a masculine world, and that's what Earth will always be to them. There are only a few women left on Earth, and they're of such subnormal intelligence as to be only a menace to any possible future progeny. Our birthrate has stopped. We are living under extremely abnormal circumstances without women. I have, as I said before, but one recommendation to this Committee, and you take it for what it's worth. I personally don't care—much—and that isn't important either."

"What is your recommendation, Bowren?"

"I assure you that the formulas in that book will work for us, Mr. Chairman. Will you accept the reports of the scientists who investigated those formulas?"

"I will," the Chairman said hoarsely. "I'll accept it. Why not—?"

Bowren grinned thinly at the ten men. "There's the secret of doing what the women have done. It'll work for us too. Our only chance for survival is to follow their procedure. We've got to start turning at least a percentage of ourselves into women."

One man leaned forward and put his head on his arms. The others sat there, in a kind of stunned numb attitude, their eyes drifting vaguely.

The Chairman coughed and looked around the silent hall, and at the other ten men in it.

"Any volunteers?" he whispered.

THE SWORD

By Frank
Quattrocchi



Illustrated by Tom Beecham

There were but three days in which to 'decipher the most cryptic message ever delivered to earth.

GEORGE HARRISON noticed the flashing red light on the instrument panel as he turned onto the bridge to Balboa Island. Just over the bridge, he pulled the car to the curb and flipped the switch with violence. "Harrison," he muttered.

"How's the water, fella?" asked

the voice of Bob Mills, his assistant.

There was a beautiful moon over the island. The surf lapped at the tiers of the picturesque bridge. Soft music was playing somewhere. There was a tinkle of young laughter on the light sea breeze.

Harrison was vacationing and he viewed the emergency contact from



Intersolar Spaceport with annoyance.

"What do you want, Bob?"

"Sorry, George," Bob Mills said more seriously. "I guess you got to come back."

"Listen—" protested Harrison.

"Orders, George—orders from upstairs."

Harrison took a long look at the pleasant island street stretching out before him. Sea-corroded street lamps lit the short, island thoroughfare. People in light blue jeans, bronzed youths in skipper caps, deep-tanned girls in terry-cloth.

"What the hell is it?"

"Don't know, but it's big. Better hurry." He clicked off.

Harrison skidded the car into a squealing turn. Angrily, he raced over the bridge and onto the roaring highway. Thirty minutes later Intersolar Spaceport, Los Angeles, blazed ahead of him.

The main gate guards waved him in immediately and two cycle guards ran interference for him through the scores of video newsmen who lined the spaceport street.

Bob Mills met him at the entrance to the Administration building.

"Sorry, George, but—"

"Yeah. Oh, sure. Now what the hell is it all about?"

Mills handed him a sheaf of teletransmittals. They bore heavy secret stamps. Harrison looked up quizzically.

"You saw the video boys," Mills said. "The wheels think there might be some hysteria."

"Any reason for it?"

"Not that we know of—not that I know of anyway. The thing is

coming in awfully fast—speed of light times a factor of at least two, maybe four."

Harrison whistled softly and scanned the reports frowning.

"They contacted us—"

"What?"

"—in perfect Intersolar Convention code. Said they were coming in. That's all. The port boys have done all they could to find out what to expect and prepare for it. Somebody thought Engineering might be needed—that's why they sent for you."

"Used Intersolar Convention code, eh," mused Harrison.

"Yes," said Mills. "But there's nothing like this thing known in the solar system, nothing even close to this fast. Besides that, there was a sighting several days ago that's being studied."

"One of the radio observatories claims to have received a new signal from one of the star clusters..."

THE HUGE metal vessel settled to a perfect contact with its assigned strip. It hovered over the geometric center of the long runway and touched without raising a speck of dust.

Not a sound, not a puff of smoke issued from any part of it. Immediately it rose a few feet above the concrete and began to move toward the parking strip. It moved with the weightless ease of an ancient dirigible on a still day. It was easily the largest, strangest object ever seen before at the spaceport.

A team of searchlight men swivelled the large spot atop the tower and bathed the ship in orange light.

"What's that mean?" asked Mills paging his way through a book.

"Halt propulsion equipment," I think," said Harrison.

"It's a good thing the code makers were vague about that," smiled Mills. "It's a good thing they didn't say jets or rockets—'cause this thing hasn't got any."

"Attention!"

That single word suddenly issued from the alien ship.

"The Races of Wan greet you."

It might have been the voice of a frog. It was low, guttural, entirely alien, entirely without either enthusiasm or trace of human emotion.

"Jesus!" muttered Mills.

Scores of video teams focused equipment on the gleaming alien.

"The Races of Wan desire contact with you."

"In English yet!" amazed Mills.

"The basis of this contact together with its nature are dependent upon you!"

The voice had become ugly. There was nothing human about it save only the words, which were in flawless English.

"Your system has long been under surveillance by the Races of Wan. Your—progress has been noted."

There was almost a note of contempt, thought Harrison, in the last sentence.

"Your system is about to reach others. It therefore becomes a matter of urgency that the Races of Wan make contact.

"Your cultural grasp is as yet quite small. You reach four of your own system's planets. You have attempted—with little success—colo-

nization. You anticipate further penetrations.

"You master the physical conditions of your system with difficulty. You are a victim of many of the natural laws—natural laws which you dimly perceive.

"But you master yourselves with greatest difficulty, and you are infinitely more a victim of forces within your very nature—*forces which you know almost not at all.*"

"What the hell—" began Mills.

"Because of this disparity your maturity as a race is much in doubt. There are many among the cultures of the stars who would consider your race deviant and deadly. There are a very few who would welcome you to the reaches of space.

"But most desire more information. Thus our visit. We have come to gather data that will determine your—disposition—

"Your race accepts the principle of extermination. You relentlessly seek and kill for commercial or political advantage. You live in mistrust and envy and threat. Yet, as earthlings, you have power. It is not great, but it contains a threat. We wish now to know the extent of that threat.

"Here is the test."

Suddenly an image resolved itself on the gleaming metal of the ship itself.

It was a blueprint.

A hundred cameras focused on it.

"Construct this. It is defective. Correct that which renders it not useful. We shall return in three days for your solution."

"Good God!" exclaimed Harrison. "It's a—sword!"

"A what?" asked Mills.

"A sword—people used to chop each other's heads off with them."

Almost at once the metal giant was seen to move. Quickly it retraced its path across the apron, remained poised on the center of the runway, then disappeared almost instantaneously.

THE INTERSOLAR COUNCIL weathered the storm. The representative of the colony on Venus was recalled, his political life temporarily ended. A vigilante committee did for a time picket the spaceport. But the tremendous emotional outbursts of the first day gradually gave way to a semblance of order.

Video speakers, some of them with huge followings, still denounced the ISC for permitting the alien to land in the first place. Others clamored for a fleet to pursue the arrogant visitor. And there were many fools who chose to ignore the implications of the strange speech and its implied threat. Some even thought it was a gigantic hoax.

But most men soon came to restore their trust in the scientists of the Intersolar Council.

Harrison cast down the long sheet of morning news that had rolled out of the machine.

"The fools! They'll play politics right up to the last, won't they?"

"What else?" asked Mills. "Playing politics is as good a way as any of avoiding what you can't figure out or solve."

"And yet, what the hell are we doing here?" Harrison mused.

"Listen to this."

He picked up a stapled sheaf of papers from his desk.

"*'Analysis of word usage indicates a complete knowledge of the English language'*—that's brilliant, isn't it? *'The ideational content and general semantic tone of the alien speech indicates a relatively high intelligence.*

'Usage is current, precise . . .'" Bob, the man who wrote that report is one of the finest semantics experts in the solar system. He's the brain that finally broke that ancient Martian ceremonial language they found on the columns."

"Well, mastermind," said Mills. "What will the *Engineering* report say when you get around to writing it?"

"Engineering report? What are you talking about?"

"You didn't read the memo on your desk then? The one that requested a preliminary report from every department by 2200 today."

"Good God, no," said Harrison snapping up the thin yellow sheet. "What in hell has a sword got to do with Engineering?"

"What's it got to do with Semantics?" mocked Robert Mills.

Construct this. It is defective. Correct that which renders it not useful.

Harrison's eyes burned. He would have to quit pretty soon and dictate the report. There wasn't any use in trying to go beyond a certain point. You got so damned tired you couldn't think straight. You might as well go to bed and rest. Bob Mills had gone long before.

He poured over the blueprint

again, striving to concentrate. Why in hell had he not given up altogether? What possible contribution could an engineer make toward the solution of such a problem?

Construct this.

You simply made the thing according to a simple blueprint. You tried out what you got, found out what it was good for, found out then what was keeping it from doing that. You fixed it.

Well, the sword had been constructed. Fantastic effort had been directed into producing a perfect model of the print. Every minute convolution had been followed to an incredible point of perfection. Harrison was willing to bet there was less than a ten thousandths error—even in the handle, where the curves seemed to be more artistic than mechanical.

It is defective.

What was defective about it? Nobody had actually tried the ancient weapon, it was true. You didn't go around chopping people's heads off. But experts on such things had examined the twelve-pound blade and had pronounced it "well balanced"—whatever that meant. It would crack a skull, sever arteries, kill or maim.

Correct . . .

What was there to correct? Could you make it maim or kill better? Could you sharpen it so that it would go through thick clothing or fur? Yes. Could you make it a bit heavier so that it might slice a metal shield? Yes, perhaps. All of these things had been half-heartedly suggested. But nobody had yet proposed any kind of qualitative change or been able to suggest any

kind of change that would meet the next admonition of the alien:

Correct that which renders it not useful.

What actually could be done to a weapon to make it useful? Matter of fact, what was there about the present weapon that made it *not* useful. Apparently it was useful as hell—useful enough to cut a man's throat, pierce his heart, slice an arm off him . . .

What were the possible swords; what was the morphology of *concept sword*?

Harrison picked up a dog-eared report.

There was the *rapier*, a thin, light, extremely flexible kind of sword (if you considered the word "sword" generic, as the Semantics expert had pointed out). It was good for duels, man-to-man combat, usually on what the ancients had called the "field of honor."

There were all kinds of short swords, dirks, shivs, stilettos, daggers. They were the weapons of stealth men—and sometimes women—used in the night. The assassin's weapon, the glitter in the darkened alley.

There were the *machetes*. Jungle knives, cane-cutting instruments. The bayonets . . .

You could go on and on from there, apparently. But what did you get? They were all more or less useful, Harrison supposed. There was nothing more you could do with any kind of sword that was designed for a specific purpose.

Harrison sighed in despair. He had expected vastly more when he had first heard the alien mention "test". He had expected some com-

plex instrument, something new to Terra and her colonies. Something involving complex and perhaps unknown principles of an alien technology. Something appropriate to the strange metal craft that traveled so very fast.

Or perhaps a paradox. A thing that could not be constructed without exploding, like a lattice of U235 of exactly critical size. Or an instrument that must be assembled in an impossible sequence, like a clock with a complete, single-pieced outer shell. Or a part of a thing that could be "corrected" only if the whole thing were visualized, constructed, and tested.

No, the blueprint he held now involved an awareness that must prove beyond mere technology, or at least Terran technology. Maybe it involved an awareness that transcended Terran philosophy as well.

Harrison slapped the pencil down on his desk, rose, put his coat on, and left the office.

"... we are guilty as the angels of the bible were guilty. Pride! That's it, folks, pride. False pride..."

Harrison fringed the intent crowd of people cursing when, frequently, someone carelessly bumped into him in an effort to get nearer the sidewalk preacher.

"We tried to live with the angels above. We wanted to fly like the birds. And then we wanted to fly like the angels..."

Someone near Harrison muttered an "Amen". Harrison wove his way through them wondering where the hundreds of such evangelists had come from so suddenly.

"Ya know, folks, the angels themselves got uppity once. *They* wanted to be like Gawd himself, they did. Now, it's us."

There was a small flutter of laughter among the crowd. It was very quickly suppressed—so quickly that Harrison gained a new appreciation of the tenor of the crowd.

"That's right, laugh! Laugh at our folly!" continued the thin-faced, bright-eyed man. "It was a sword that the angel used to kick Adam and Eve out of the garden. The sword figures all through the bible, folks. You ought to read the bible. You ought to get to know it. It's all there. All there for you to read..."

By Christ, thought Harrison. Here was an aspect of the concept, sword, he had not considered. Morphological thinking required that *all* aspects of a concept be explored, all plotted against all others for possible correlation...

No. That was silly. The bible was a beautiful piece of literature and some people believed it inspired. But the great good men who wrote the bible had little scientific knowledge of a sword. They would simply describe the weapon as a modern fiction writer would describe a blaster—without knowing any more about one than that it existed and was a weapon.

Surely the ISC's weapons expert could be trusted to know his swords.

"Go on home," Mills pleaded. "You're shot and you know it. You said yourself this isn't our show."

"You go home, Bob. I'm all right."

"George . . . you're acting

strange. Strange as hell."

"I'm all right. Leave me alone," snapped Harrison becoming irritable.

Mills watched silently as the haggard man slipped a tablet into his mouth.

"It's all right, Bob," smiled Harrison weakly. "I know how to use Benzedrine."

"You damn fool, you'll wreck yourself . . ."

But the engineer ignored him. He continued paging his way through the book—the bible, no less. George Harrison and the bible!

Mills was awakened by the telephone. Reaching in the dark for it he answered almost without reaching consciousness.

It was Harrison.

"Bob, listen to me. If an angel were to look at us right now, what would he think?"

"For God's sake!" Mills cried into the instrument. "What's up? You still at the office?"

"Yeah, answer the question."

"Hold on, George. I'll be down and get you. What you been drinking?"

"Bob, would he—she—think much of us? Would the angel figure we were . . ."

"How the hell would I know?"

"No, Bob, what you should have asked is 'how the hell would *he* know.'"

In a daze Mills heard the click as the other hung up.

"Mr. Harrison, your assistant is looking for you."

"Yes, I know, Kirk. But will you do it?"

"Mr. Harrison, we only got one of them. If we screw it up it'll take time to make another and today's the day, you know."

"I'll take the blame."

"Mr. Harrison, you look kind of funny. Hadn't I better . . ."

Harrison was sketching a drawing on a piece of waste paper. He was working in quick rough strokes, copying something from a book.

"They'll blame us both, Mr. Harrison. Anyway, it might hold up somebody who's got a real idea . . ."

"I have a real idea, Kirk. I'm going to draw it for you."

The metal worker noticed that the book Harrison was copying from was a dictionary, a very old and battered one.

"Here, can you follow what I've drawn?"

The metal worker accepted it reluctantly, giving Harrison an odd, almost patronizing look. "This is crazy."

"Kirk!"

"Look, Mr. Harrison. We worked a long time together. You . . ."

Harrison suddenly rose from the chair.

"This is our one chance of beating this thing, no matter how crazy it seems. Will you do the job?"

"You believe you got something, eh," the other said. "You think you have?"

"I have to have."

"Gentlemen," said the President of the Intersolar Council. "There is very little to say. There can be no denying the fact that we have exhausted our efforts at finding a satisfactory solution.

"The contents of this book of re-

ports represents the greatest concentration of expert reasoning perhaps ever applied to a single problem.

"But alas, the problem remains—unsolved."

He paused to glance at his wrist-watch.

"The aliens return in an hour. As you very well know there is one action that remains for us. It is one we have held to this hour. It is one that has always been present and one that we have been constantly urged to use.

"Force, gentlemen. It is not insignificant. It lies at our command. It represents the technology of the Intersolar alliance. I will entertain a motion to use it."

There were no nay votes.

THE ALIEN arrived on schedule. The ship grew from a tiny bright speck in the sky to full size. It settled to a graceful landing as before on the strip and silently moved into the revetment.

Again it spoke in the voice of the frog, but the tone was, if anything, less human this time.

"Earthmen, we have come for your solution."

At that instant a hundred gun crews stiffened and waited for a signal behind their carefully camouflaged blast plates and inside dummy buildings . . .

Harrison was running. The Administration building was empty. His footsteps echoed through the long, silent halls. He headed for an emergency exit that led directly to the blast tunnel. All doors were locked.

The only way was over the wall. He paused and tossed the awkward, heavy object over the ten-foot wall. Then, backing toward the building, he ran and jumped for a hold onto the wall's edge. He failed by several inches to reach it.

"Earthmen, we have come for your solution."

He ran at the wall once more. This time he caught a fair hold with one hand. Digging at the rough concrete with his feet he was able to secure the hold and begin pulling his body upward.

Quickly he was over the wall and onto the apron, a hundred yards from the shining metal ship.

"Wait!" he shouted. "Wait, for God's sake!"

Picking up the object he had tossed over the wall, he raised it above his head and ran toward the alien ship.

"Wait! Here is the solution," he gasped.

Somehow the command to fire was not given. There was a long moment of complete silence on the field. Nothing moved.

Then the voice of the frog boomed from the alien ship.

"The solution appears to be correct."

The alien left three days later. Regular communications would begin within the week. Future meetings would work out technical difficulties. Preliminary trade agreements, adequately safeguarded, were drafted and transmitted to the ship. The Races of Man and the Races of Wan were in harmony.

"It was simply too obvious for

any of us to notice," explained Harrison. "It took that street-corner evangelist to jar something loose—even then it was an accident."

"And the rest of us—" started Mills.

"While *all* of us worked on the assumption that the test involved a showing of strength—a flexing of technological muscle."

"I still don't see—"

"Well, the evangelist put the problem on the right basis. He humbled us, exalted the aliens—that is, he thought the alien was somehow a messenger from God to put us in our places."

"We were pretty humble ourselves, especially the last day," protested Mills.

"But humble about our *technology*," put in Harrison. "The aliens must be plenty far beyond us technologically. But how about their cultural superiority. Ask yourself how a culture that could produce the ship we've just seen could survive without—well destroying itself."

"I still don't understand."

"The aliens developed pretty much equally in *all* directions. They developed force—plenty of it, enough force to kick that big ship through space at the speed of light plus. They must also have learned to control force, to live with it."

"Maybe you better stick to the sword business," said Mills.

"The sword is the crux of the matter. What did the alien say about the sword? 'It is defective.' It is defective, Bob. Not as an instrument of death. It will kill a man

or injure him well enough.

"But a sword—or any other instrument of force for that matter—is a terribly ineffectual tool. It was originally designed to act as a tool of social control. Did it—or any subsequent weapon of force—do a good job at that?"

"As long as man used swords, or gunpowder, or atom bombs, or hydrogen bombs, he was doomed to a fearful anarchy of unsolved problems and dreadful immaturity.

"No, the sword is not useful. To fix it—to 'correct that which renders it not useful'—meant to make it something else. Now what in the hell did that mean? What can you do with a sword?"

"You mean besides cut a man in two with it," said Mills.

"Yes, what can you do with it besides use it as a weapon? Here our street-corner friend referred me to the right place: The bible!

"They shall beat their swords into ploughshares, and their spears into pruning-hooks; nation shall not lift up sword against nation, neither shall they learn war any more."

"The aliens just wanted to know if we meant what we said."

"Do we?"

"We better. It's going to take a hell of a lot more than a silly ploughshare to convince those babies on that ship. But there's more to it than that. The ability of a culture finally to pound all of its swords—its intellectual ones as well as its steel ones—into ploughshares must be some kind of least common denominator for cultures that are headed for the stars."

Beneath the stagnant water shadowed by water lilies Harry found the fascinating world of the rotifers—but it was their world, and they resented intrusion.

THE ROTIFERS

By Robert Abernathy

Illustrated by Virgil Finlay

HENRY CHATHAM knelt by the brink of his garden pond, a glass fish bowl cupped in his thin, nervous hands. Carefully he dipped the bowl into the green-scummed water and, moving it gently, let trailing streamers of submerged water weeds drift into it. Then he picked up the old scissors he had laid on the bank, and clipped the stems of the floating plants, getting as much of them as he could in the container.

When he righted the bowl and got stiffly to his feet, it contained, he thought hopefully, a fair cross-section of fresh-water plankton. He was pleased with himself for remembering that term from the book he had studied assiduously for the last few nights in order to be able to cope with Harry's inevitable questions.

There was even a shiny black

water beetle doing insane circles on the surface of the water in the fish bowl. At sight of the insect, the eyes of the twelve-year-old boy, who had been standing by in silent expectation, widened with interest.

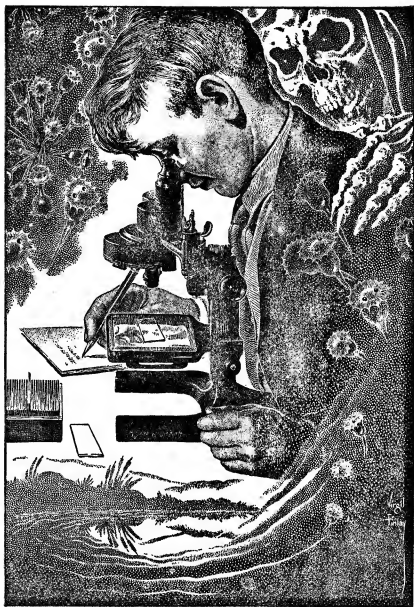
"What's that thing, Dad?" he asked excitedly. "What's that crazy bug?"

"I don't know its scientific name, I'm afraid," said Henry Chatham. "But when I was a boy we used to call them whirligig beetles."

"He doesn't seem to think he has enough room in the bowl," said Harry thoughtfully. "Maybe we better put him back in the pond, Dad."

"I thought you might want to look at him through the microscope," the father said in some surprise.

"I think we ought to put him back," insisted Harry.



Mr. Chatham held the dripping bowl obligingly. Harry's hand, a thin boy's hand with narrow sensitive fingers, hovered over the water, and when the beetle paused for a moment in its gyrations, made a dive for it.

But the whirligig beetle saw the hand coming, and, quicker than a wink, plunged under the water and scooted rapidly to the very bottom of the bowl.

Harry's young face was rueful; he wiped his wet hand on his trousers. "I guess he wants to stay," he supposed.

The two went up the garden path together and into the house, Mr. Chatham bearing the fish bowl before him like a votive offering. Harry's mother met them at the door, brandishing an old towel.

"Here," she said firmly, "you wipe that thing off before you bring it in the house. And don't drip any of that dirty pond water on my good carpet."

"It's not dirty," said Henry Chatham. "It's just full of life, plants and animals too small for the eye to see. But Harry's going to see them with his microscope." He accepted the towel and wiped the water and slime from the outside of the bowl; then, in the living-room, he set it beside an open window, where the life-giving summer sun slanted in and fell on the green plants.

THE BRAND-NEW microscope stood nearby, in a good light. It was an expensive microscope, no toy for a child, and it magnified four hundred diameters. Henry

Chatham had bought it because he believed that his only son showed a desire to peer into the mysteries of smallness, and so far Harry had not disappointed him; he had been ecstatic over the instrument. Together they had compared hairs from their two heads, had seen the point of a fine sewing needle made to look like the tip of a crowbar by the lowest power of the microscope, had made grains of salt look like discarded chunks of glass brick, had captured a house-fly and marvelled at its clawed hairy feet, its great red faceted eyes, and the delicate veining and fringing of its wings.

Harry was staring at the bowl of pond water in a sort of fascination. "Are there germs in the water, Dad? Mother says pond water is full of germs."

"I suppose so," answered Mr. Chatham, somewhat embarrassed. The book on microscopic freshwater fauna had been explicit about *Paramecium* and *Euglena*, diatoms and rhizopods, but it had failed to mention anything so vulgar as germs. But he supposed that which the book called Protozoa, the one-celled animalcules, were the same as germs.

He said, "To look at things in water like this, you want to use a well-slide. It tells how to fix one in the instruction book."

He let Harry find the glass slide with a cup ground into it, and another smooth slip of glass to cover it. Then he half-showed, half-told him how to scrape gently along the bottom sides of the drifting leaves, to capture the teeming life that dwelt there in the slime. When the boy understood, his young hands

were quickly more skillful than his father's; they filled the well with a few drops of water that was promisingly green and murky.

Already Harry knew how to adjust the lighting mirror under the stage of the microscope and turn the focusing screws. He did so, bent intently over the eyepiece, squinting down the polished barrel in the happy expectation of wonders.

Henry Chatham's eyes wandered to the fish bowl, where the whirligig beetle had come to the top again and was describing intricate patterns among the water plants. He looked back to his son, and saw that Harry had ceased to turn the screws and instead was just looking—looking with a rapt, delicious fixity. His hands lay loosely clenched on the table top, and he hardly seemed to breathe. Only once or twice his lips moved as if to shape an exclamation that was snatched away by some new vision.

"Have you got it, Harry?" asked his father after two or three minutes during which the boy did not move.

Harry took a last long look, then glanced up, blinking slightly.

"You look, Dad!" he exclaimed warmly. "It's—it's like a garden in the water, full of funny little people!"

Mr. Chatham, not reluctantly, bent to gaze into the eyepiece. This was new to him too, and instantly he saw the aptness of Harry's simile. There was a garden there, of weird, green, transparent stalks composed of plainly visible cells fastened end to end, with globules and bladders like fruits or seed-pods attached to them, floating among them; and in the garden the strange little people

swam to and fro, or clung with odd appendages to the stalks and branches. Their bodies were transparent like the plants, and in them were pulsing hearts and other organs plainly visible. They looked a little like sea horses with pointed tails, but their heads were different, small and rounded, with big, dark, glistening eyes.

All at once Mr. Chatham realized that Harry was speaking to him, still in high excitement.

"What are they, Dad?" he begged to know.

His father straightened up and shook his head puzzledly. "I don't know, Harry," he answered slowly, casting about in his memory. He seemed to remember a microphotograph of a creature like those in the book he had studied, but the name that had gone with it eluded him. He had worked as an accountant for so many years that his memory was all for figures now.

He bent over once more to immerse his eyes and mind in the green water-garden on the slide. The little creatures swam to and fro as before, growing hazy and dwindling or swelling as they swam out of the narrow focus of the lens; he gazed at those who paused in sharp definition, and saw that, although he had at first seen no visible means of propulsion, each creature bore about its head a halo of thread-like, flickering cilia that lashed the water and drew it forward, for all the world like an airplane propeller or a rapidly turning wheel.

"I know what they are!" exclaimed Henry Chatham, turning to his son with an almost boyish ex-

citement. "They're rotifers! That means 'wheel-bearers', and they were called that because to the first scientists who saw them it looked like they swam with wheels."

Harry had got down the book and was leafing through the pages. He looked up seriously. "Here they are," he said. "Here's a picture that looks almost like the ones in our pond water."

"Let's see," said his father. They looked at the pictures and descriptions of the Rotifera; there was a good deal of concrete information on the habits and physiology of these odd and complex little animals who live their swarming lives in the shallow, stagnant waters of the Earth. It said that they were much more highly organized than Protozoa, having a discernible heart, brain, digestive system, and nervous system, and that their reproduction was by means of two sexes like that of the higher orders. Beyond that, they were a mystery; their relationship to other life-forms remained shrouded in doubt.

"You've got something interesting there," said Henry Chatham with satisfaction. "Maybe you'll find out something about them that nobody knows yet."

He was pleased when Harry spent all the rest of that Sunday afternoon peering into the microscope, watching the rotifers, and even more pleased when the boy found a pencil and paper and tried, in an amateurish way, to draw and describe what he saw in the green water-garden.

Beyond a doubt, Henry thought, here was a hobby that had captured Harry as nothing else ever had.

MRS. CHATHAM was not so pleased. When her husband laid down his evening paper and went into the kitchen for a drink of water, she cornered him and hissed at him: "I told you you had no business buying Harry a thing like that! If he keeps on at this rate, he'll wear his eyes out in no time."

Henry Chatham set down his water glass and looked straight at his wife. "Sally, Harry's eyes are young and he's using them to learn with. You've never been much worried over me, using my eyes up eight hours a day, five days a week, over a blind-alley bookkeeping job."

He left her angrily silent and went back to his paper. He would lower the paper every now and then to watch Harry, in his corner of the living-room, bowed obliviously over the microscope and the secret life of the rotifers.

Once the boy glanced up from his periodic drawing and asked, with the air of one who proposes a pondered question: "Dad, if you look through a microscope the wrong way is it a telescope?"

Mr. Chatham lowered his paper and bit his underlip. "I don't think so—no, I don't know. When you look through a microscope, it makes things seem closer—one way, that is; if you looked the other way, it would probably make them seem farther off. What did you want to know for?"

"Oh—nothing," Harry turned back to his work. As if on afterthought, he explained, "I was wondering if the rotifers could see me when I'm looking at them."

Mr. Chatham laughed, a little nervously, because the strange

fancies which his son sometimes voiced upset his ordered mind. Remembering the dark glistening eyes of the rotifers he had seen, however, he could recognize whence this question had stemmed.

At dusk, Harry insisted on setting up the substage lamp which had been bought with the microscope, and by whose light he could go on looking until his bedtime, when his father helped him arrange a wick to feed the little glass-covered well in the slide so it would not dry up before morning. It was unwillingly, and only after his mother's strenuous complaints, that the boy went to bed at ten o'clock.

In the following days his interest became more and more intense. He spent long hours, almost without moving, watching the rotifers. For the little animals had become the sole object which he desired to study under the microscope, and even his father found it difficult to understand such an enthusiasm.

During the long hours at the office to which he commuted, Henry Chatham often found the vision of his son, absorbed with the invisible world that the microscope had opened to him, coming between him and the columns in the ledgers. And sometimes, too, he envisioned the dim green water-garden where the little things swam to and fro, and a strangeness filled his thoughts.

On Wednesday evening, he glanced at the fish bowl and noticed that the water beetle, the whirligig beetle, was missing. Casually, he asked his son about it.

"I had to get rid of him," said the boy with a trace of uneasiness in his manner. "I took him out and

squashed him."

"Why did you have to do that?"

"He was eating the rotifers and their eggs," said Harry, with what seemed to be a touch of remembered anger at the beetle. He glanced toward his work-table, where three or four well-slides with small green pools under their glass covers now rested in addition to the one that was under the microscope.

"How did you find out he was eating them?" inquired Mr. Chatham, feeling a warmth of pride at the thought that Harry had discovered such a scientific fact for himself.

The boy hesitated oddly. "I—I looked it up in the book," he answered.

His father masked his faint disappointment. "That's fine," he said. "I guess you find out more about them all the time."

"Uh-huh," admitted Harry, turning back to his table.

There was undoubtedly something a little strange about Harry's manner; and now Mr. Chatham realized that it had been two days since Harry had asked him to "Quick, take a look!" at the newest wonder he had discovered. With this thought teasing at his mind, the father walked casually over to the table where his son sat hunched and, looking down at the litter of slides and papers—some of which were covered with figures and scribbings of which he could make nothing. He said diffidently, "How about a look?"

Harry glanced up as if startled. He was silent a moment; then he slid reluctantly from his chair and said, "All right."

Mr. Chatham sat down and bent over the microscope. Puzzled and a little hurt, he twirled the focusing vernier and peered into the eyepiece, looking down once more into the green water world of the rotifers.

THERE WAS a swarm of them under the lens, and they swam lazily to and fro, their cilia beating like miniature propellers. Their dark eyes stared, wet and glistening; they drifted in the motionless water, and clung with sucker-like pseudo-feet to the tangled plant stems.

Then, as he almost looked away, one of them detached itself from the group and swam upward, toward him, growing larger and blurring as it rose out of the focus of the microscope. The last thing that remained defined, before it became a shapeless gray blob and vanished, was the dark blotches of the great cold eyes, seeming to stare full at him—cold, motionless, but alive.

It was a curious experience. Henry Chatham drew suddenly back from the eyepiece, with an involuntary shudder that he could not explain to himself. He said haltingly, "They look interesting."

"Sure, Dad," said Harry. He moved to occupy the chair again, and his dark young head bowed once more over the microscope. His father walked back across the room and sank gratefully into his armchair—after all, it had been a hard day at the office. He watched Harry work the focusing screws as if trying to find something, then take his pencil and begin to write quickly

and impatiently.

It was with a guilty feeling of prying that, after Harry had been sent reluctantly to bed, Henry Chatham took a tentative look at those papers which lay in apparent disorder on his son's work table. He frowned uncomprehendingly at the things that were written there; it was neither mathematics nor language, but many of the scribbles were jumbles of letters and figures. It looked like code, and he remembered that less than a year ago, Harry had been passionately interested in cryptography, and had shown what his father, at least, believed to be a considerable aptitude for such things. . . . But what did cryptography have to do with microscopy, or codes with—rotifers?

Nowhere did there seem to be a key, but there were occasional words and phrases jotted into the margins of some of the sheets. Mr. Chatham read these, and learned nothing. "Can't dry up, but they can," said one. "Beds of germs," said another. And in the corner of one sheet, "1—Yes. 2—No." The only thing that looked like a translation was the note: "rty34pr is the pond."

Mr. Chatham shook his head bewilderedly, replacing the sheets carefully as they had been. Why should Harry want to keep notes on his scientific hobby in code? he wondered, rationalizing even as he wondered. He went to bed still puzzling, but it did not keep him from sleeping, for he was tired.

Then, only the next evening, his wife maneuvered to get him alone with her and burst out passionately:

"Henry, I told you that microscope was going to ruin Harry's eyesight! I was watching him today when he didn't know I was watching him, and I saw him winking and blinking right while he kept on looking into the thing. I was minded to stop him then and there, but I want you to assert *your* authority with him and tell him he can't go on."

Henry Chatham passed one nervous hand over his own aching eyes. He asked mildly, "Are you sure it wasn't just your imagination, Sally? After all, a person blinks quite normally, you know."

"It was not my imagination!" snapped Mrs. Chatham. "I know the symptoms of eyestrain when I see them, I guess. You'll have to stop Harry using that thing so much, or else be prepared to buy him glasses."

"All right, Sally," said Mr. Chatham wearily. "I'll see if I can't persuade him to be a little more moderate."

He went slowly into the living-room. At the moment, Harry was not using the microscope; instead, he seemed to be studying one of his cryptic pages of notes. As his father entered, he looked up sharply and swiftly laid the sheet down—face down.

Perhaps it wasn't all Sally's imagination; the boy did look nervous, and there was a drawn, white look to his thin young face. His father said gently, "Harry, Mother tells me she saw you blinking, as if your eyes were tired, when you were looking into the microscope today. You know if you look too much, it can be a strain on your sight."

Harry nodded quickly, too quickly, perhaps. "Yes, Dad," he said. "I read that in the book. It says there that if you close the eye you're looking with for a little while, it rests you and your eyes don't get tired. So I was practising that this afternoon. Mother must have been watching me then, and got the wrong idea."

"Oh," said Henry Chatham. "Well, it's good that you're trying to be careful. But you've got your mother worried, and that's not so good. I wish, myself, that you wouldn't spend all your time with the microscope. Don't you ever play baseball with the fellows any more?"

"I haven't got time," said the boy, with a curious stubborn twist to his mouth. "I can't right now, Dad." He glanced toward the microscope.

"Your rotifers won't die if you leave them alone for a while. And if they do, there'll always be a new crop."

"But I'd lose track of them," said Harry strangely. "Their lives are so short—they live so awfully fast. You don't know how fast they live."

"I've seen them," answered his father. "I guess they're fast, all right." He did not know quite what to make of it all, so he settled himself in his chair with his paper.

But that night, after Harry had gone later than usual to bed, he stirred himself to take down the book that dealt with life in pond-water. There was a memory pricking at his mind; the memory of the water beetle, which Harry had killed because, he said, he was eating the rotifers and their eggs. And

the boy had said he had found that fact in the book.

Mr. Chatham turned through the book; he read, with aching eyes, all that it said about rotifers. He searched for information on the beetle, and found there was a whole family of whirligig beetles. There was some material here on the characteristics and habits of the Gyrinidae, but nowhere did it mention the devouring of rotifers or their eggs among their customs.

He tried the topical index, but there was no help there.

Harry must have lied, thought his father with a whirling head. But why, why in God's name should he say he'd looked a thing up in the book when he must have found it out for himself, the hard way? There was no sense in it. He went back to the book, convinced that, sleepy as he was, he must have missed a point. The information simply wasn't there.

He got to his feet and crossed the room to Harry's work table; he switched on the light over it and stood looking down at the pages of mystic notations. There were more pages now, quite a few. But none of them seemed to mean anything. The earlier pictures of rotifers which Harry had drawn had given way entirely to mysterious figures.

Then the simple explanation occurred to him, and he switched off the light with a deep feeling of relief. Harry hadn't really *known* that the water beetle ate rotifers; he had just suspected it. And, with his boy's respect for fair play, he had hesitated to admit that he had executed the beetle merely on suspicion.

That didn't take the lie away, but it removed the mystery at least.

HENRY CHATHAM slept badly that night and dreamed distorted dreams. But when the alarm clock shrilled in the gray of morning, jarring him awake, the dream in which he had been immersed skittered away to the back of his mind, out of knowing, and sat there leering at him with strange, dark, glistening eyes.

He dressed, washed the flat morning taste out of his mouth with coffee, and took his way to his train and the ten-minute ride into the city. On the way there, instead of snatching a look at the morning paper, he sat still in his seat, head bowed, trying to recapture the dream whose vanishing made him uneasy. He was superstitious about dreams in an up-to-date way, believing them not warnings from some Beyond outside himself, but from a subconscious more knowing than the waking conscious mind.

During the morning his work went slowly, for he kept pausing, sometimes in the midst of totalling a column of figures, to grasp at some mocking half-memory of that dream. At last, elbows on his desk, staring unseeingly at the clock on the wall, in the midst of the subdued murmur of the office, his mind went back to Harry, dark head bowed motionless over the barrel of his microscope, looking, always looking into the pale green water-gardens and the unseen lives of the beings that . . .

All at once it came to him, the dream he had dreamed. *He* had

been bending over the microscope, *he* had been looking into the unseen world, and the horror of what he had seen gripped him now and brought out the chill sweat on his body.

For he had seen his son there in the clouded water, among the twisted glassy plants, his face turned upward and eyes wide in the agonized appeal of the drowning; and bubbles rising, fading. But around him had been a swarm of the weird creatures, and they had been dragging him down, down, blurring out of focus, and their great dark eyes glistening wetly, coldly. . .

He was sitting rigid at his desk, his work forgotten; all at once he saw the clock and noticed with a start that it was already eleven a.m. A fear he could not define seized on him, and his hand reached spasmodically for the telephone on his desk.

But before he touched it, it began ringing.

After a moment's paralysis, he picked up the receiver. It was his wife's voice that came shrilly over the wires.

"Henry!" she cried. "Is that you?"

"Hello, Sally," he said with stiff lips. Her voice as she answered seemed to come nearer and go farther away, and he realized that his hand holding the instrument was shaking.

"Henry, you've got to come home right now. Harry's sick. He's got a high fever, and he's been asking for you."

He moistened his lips and said, "I'll be right home. I'll take a taxi."

"Hurry!" she exclaimed. "He's

been saying queer things. I think he's delirious." She paused, and added, "And it's all the fault of that microscope *you* bought him!"

"I'll be right home," he repeated dully.

HIS WIFE was not at the door to meet him; she must be upstairs, in Harry's bedroom. He paused in the living room and glanced toward the table that bore the microscope; the black, gleaming thing still stood there, but he did not see any of the slides, and the papers were piled neatly together to one side. His eyes fell on the fish bowl; it was empty, clean and shining. He knew Harry hadn't done those things; that was Sally's neatness.

Abruptly, instead of going straight up the stairs, he moved to the table and looked down at the pile of papers. The one on top was almost blank; on it was written several times: rty34pr . . . rty34pr. . . His memory for figure combinations served him; he remembered what had been written on another page: "rty34pr is the pond."

That made him think of the pond, lying quiescent under its green scum and trailing plants at the end of the garden. A step on the stair jerked him around.

It was his wife, of course. She said in a voice sharp-edged with apprehension: "What are you doing down here? Harry wants you. The doctor hasn't come; I phoned him just before I called you, but he hasn't come."

He did not answer. Instead he gestured at the pile of papers, the

empty fish bowl, an imperative question in his face.

"I threw that dirty water back in the pond. It's probably what he caught something from. And he was breaking himself down, humping over that thing. It's *your* fault, for getting it for him. Are you coming?" She glared coldly at him, turning back to the stairway.

"I'm coming," he said heavily, and followed her upstairs.

Harry lay back in his bed, a low mound under the covers. His head was propped against a single pillow, and his eyes were half-closed, the lids swollen-looking, his face hotly flushed. He was breathing slowly as if asleep.

But as his father entered the room, he opened his eyes as if with an effort, fixed them on him, said, "Dad . . . I've got to tell you."

Mr. Chatham took the chair by the bedside, quietly, leaving his wife to stand. He asked, "About what, Harry?"

"About—things." The boy's eyes shifted to his mother, at the foot of his bed. "I don't want to talk to her. *She* thinks it's just fever. But you'll understand."

Henry Chatham lifted his gaze to meet his wife's. "Maybe you'd better go downstairs and wait for the doctor, Sally."

She looked hard at him, then turned abruptly to go out. "All right," she said in a thin voice, and closed the door softly behind her.

"Now what did you want to tell me, Harry?"

"About *them* . . . the rotifers," the boy said. His eyes had drifted half-shut again but his voice was clear. "They did it to me . . . on

purpose."

"Did *what*?"

"I don't know. . . They used one of their cultures. They've got all kinds: beds of germs, under the leaves in the water. They've been growing new kinds, that will be worse than anything that ever was before. . . They live so fast, they work so fast."

Henry Chatham was silent, leaning forward beside the bed.

"It was only a little while, before I found out they knew about me. I could see them through my microscope, but they could see me too. . . And they kept signaling, swimming and turning. . . I won't tell you how to talk to them, because nobody ought to talk to them ever again. Because they find out more than they tell. . . They know about us, now, and they hate us. They never knew before—that there was anybody but them. . . So they want to kill us all."

"But why should they want to do that?" asked the father, as gently as he could. He kept telling himself, "He's delirious. It's like Sally says, he's been wearing himself out, thinking too much about—the rotifers. But the doctor will be here pretty soon, the doctor will know what to do."

"They don't like knowing that they aren't the only ones on Earth that can think. I expect people would be the same way."

"But they're such little things, Harry. They can't hurt us at all."

The boy's eyes opened wide, shadowed with terror and fever. "I told you, Dad—They're growing germs, millions and billions of them, *new* ones. . . And they kept telling

me to take them back to the pond, so they could tell all the rest, and they could all start getting ready—for war."

He remembered the shapes that swam and crept in the green water gardens, with whirling cilia and great, cold, glistening eyes. And he remembered the clean, empty fish bowl in the window downstairs.

"Don't let them, Dad," said Harry convulsively. "You've got to kill them all. The ones here and the ones in the pond. You've got to kill them good—because they don't mind being killed, and they lay lots of eggs, and their eggs can stand almost anything, even drying up. *And the eggs remember what the old ones knew.*"

"Don't worry," said Henry Chatham quickly. He grasped his son's hand, a hot limp hand that had slipped from under the coverlet. "We'll stop them. We'll drain the pond."

"That's swell," whispered the boy, his energy fading again. "I ought to have told you before, Dad—but first I was afraid you'd laugh, and then—I was just . . . afraid . . ."

His voice drifted away. And his father, looking down at the flushed face, saw that he seemed asleep. Well, that was better than the sick delirium—saying such strange, wild things—

Downstairs the doctor was saying harshly, "All right. All right. But let's have a look at the patient."

Henry Chatham came quietly downstairs; he greeted the doctor

briefly, and did not follow him to Harry's bedroom.

When he was left alone in the room, he went to the window and stood looking down at the microscope. He could not rid his head of strangeness: A window between two worlds, our world and that of the infinitely small, a window that looks both ways.

After a time, he went through the kitchen and let himself out the back door, into the noonday sunlight.

He followed the garden path, between the weed-grown beds of vegetables, until he came to the edge of the little pond. It lay there quiet in the sunlight, green-scummed and walled with stiff rank grass, a lone dragonfly swooping and wheeling above it. The image of all the stagnant waters, the fertile breeding-places of strange life, with which it was joined in the end by the tortuous hidden channels, the oozing pores of the Earth.

And it seemed to him then that he glimpsed something, a hitherto unseen miasma, rising above the pool and darkening the sunlight ever so little. A dream, a shadow—the shadow of the alien dream of things hidden in smallness, the dark dream of the rotifers.

The dragonfly, having seized a bright-winged fly that was sporting over the pond, descended heavily through the sunlit air and came to rest on a broad lily pad. Henry Chatham was suddenly afraid. He turned and walked slowly, wearily, up the path toward the house.

Personalities in Science

GALILEO

The Persecuted

NEWTON'S apple is always given a starring role whenever the story of the discovery of the law of gravity is told; yet there is another object which deserves a place in the annals of history that is equal to that now famous apple. There's a splendid bronze lamp which hangs today, as it did in the 16th century, from the roof of the cathedral in Pisa. The slightest motion will make this lamp sway. This object was to Galileo what the apple was to Newton. Putting the index finger of one hand on the wrist of the other and, using this natural clock, Galileo found that always, whether the lamp was describing large arcs or small ones, each swing or vibration took exactly the same time as any other. This seemingly simple discovery was the cornerstone of the science of motion. It was the humble beginning which served as the inspiration for such men as John Keppler, who gave us the laws of planetary motion, and for Newton's laws of gravity and motion.

Somehow, in the minds of most of us, Galileo Galilie has come down through the centuries vague-

ly connected with a telescope. But he was a man of diversified talents almost equal to those of the great Leonardo da Vinci. His family had been distinguished, but poverty had overtaken his parents; and like untold thousands of such parents they wanted their son to have a good, solid education as a doctor in order to insure his future. The one big worry that they had was that this son of theirs, who showed such great mechanical aptitude at an early age, would become interested in mathematics and so be drawn away from the security of the career they had chosen for him. The fear was obviously a well-founded one.

Besides his skill in mechanics, Galileo was far above average in such arts as sculpture and music. He painted with such skill and imagination that he defied his parents, as so many of us do, and chose an artist's career for himself. When he entered the University of Padua to begin his studies, he realized that in order to be a really good artist he would have to study geometry. Now a whole new field was opened before him.

He was able to solve the most difficult problems with ease, and he delighted in simplifying the solutions of others which had stood as

examples of greatness for hundreds of years. Naturally there was no more talk about being either a doctor or an artist; he had found the mistress who was to hold him until the end of his days.

Galileo found his work bound by laws and systems which had stood as irrefutable evidences of truth for almost two thousand years. When he rebelled against accepting these laws as gospel, he proved his contentions with experiments and facts so salient that he could scarcely be doubted. He climbed to the top of the leaning tower of Pisa to refute Aristotle. He invented a telescope to refute Ptolemy.

ARISTOTLE had taught that when two bodies, of the same substance but differing weights, were dropped from an equal height, the heavier body would reach the earth first. Believe it or not, no one had questioned this statement for 1,900 years! When Galileo had satisfied himself that the theory was all wrong he set out to prove his point. He used the now famous Leaning Tower as a proving ground. He dropped two shots of different weights from the top of the tower, and when they reached the ground at the same time he felt that he had definitely been vindicated. But all this step toward the real truth earned him was enmity. From all over the then civilized world professors and students rose in a body against him. Aristotle had said that the objects would not reach the earth at the same time—it said so right in his books. Progress such as this was too fast for the times and

Galileo was hounded from the scene of his victory and forced to seek refuge in Florence.

Now his lot was miserable. He had his Mother, a brother, and two sisters depending on him for support; and for a radical such as he was there wasn't much of anything like money coming his way. He tutored pupils to help stretch his meager earnings, and as he taught them he continued to learn himself. He had never disputed Ptolemy's laws—those that stated that the vaults of heaven revolved about the Earth—because he'd believed it himself. But now he began to believe that Copernicus had been right. Although he knew that to teach these theories was dangerous heresy, he began to teach that the Earth revolved about the sun, as did all the other known planets of the time. To prove his theory he invented a far better telescope than had ever before been made.

With this new telescope he saw for the first time that the moon was not round and flat and smooth as both Aristotle and Ptolemy had said; but that it had mountains and hollows like the Earth. He was the first to see the rings of Saturn, and found that there were lesser planets revolving around Jupiter just as other planets revolve around the sun. He proposed the theory of an unlimited universe, too, and one noble critic tried to crush him by saying: "There are only seven openings in the head—two ears, two eyes, two nostrils, and one mouth, there are only seven metals, and only seven days of the week, therefore there can be only seven planets." When Galileo made the un-

believers look through the telescope, and the scoffers saw exactly what he had told them they would see in the heavens, they cried, "Oh, well, they aren't visible to the naked eye, and so they cannot influence the Earth; and being useless, they do not exist."

When our stargazer went on to announce that not only did the Earth revolve around the sun, but that the sun also revolved; the Church stepped in. An investigating commission was established to study the teachings of Copernicus. They called in Galileo and warned him that this was pure heresy which he was teaching; they ordered him to return to the teaching of Ptolemy's nine-hundred year old theory that the vaults of heaven revolved around the Earth. If he refused he was warned that he would have to take the consequences; which in those days consisted of burning at the stake, or being crushed to death in an iron maiden.

GALILEO managed to avoid these consequences for the next 16 years, which he spent in study and in strengthening his theories even more. In 1627 he could no longer contain himself under this

thought control and wrote a book defending Copernicus. The inquisition pounced, and for his disobedience he was made to wear sackcloth and to kneel in ashes and required to swear that he would never say or *believe* again that the Earth revolved around the sun. He was told that should he refuse to swear this oath he would be condemned to torture and burning. The inquisition won, fear of torture drove Galileo to vow that he would do that which they required of him. He was carted off to prison, and though later released he spent the rest of his days with spies watching him to keep him on the path that the Church had said he must follow.

He died at 78, blind so that he could no longer see the wonders of the skies, and thoroughly crushed. But not before he had given the world a heritage of knowledge that man after man used as a foundation for the progress of the natural sciences. Galileo was so far ahead of his time that he had put forth the theory that there were no elements in the universe that differed from those on the Earth. The final establishment of this proof was made by Dr. Ira Bowen as recently as 1937!

—cw

THE END

The BLACK TIDE

Space in its far dark reaches can be fickle with a man; it can shatter his dreams, fill him with fear and hate. It can also cure a man—if he is strong enough.

By Arthur G. Stangland

Illustrated by Ed Valigursky

IT FILLED all the ebony depths of space. Twirling slowly in awesome majesty, the meteor scintillated like a massive black diamond. And with its onrush came a devastating sense of doom. He looked everywhere. To the front, to the side, and below—there was no escape. Transfixed, he stared at the great rock flashing in the fire of myriad suns as it—

Bill Staker, passenger rocket captain for Interplanetary Lines, came fully awake in his New York hotel room. For a minute, he lay unmoving on his bed, savoring the delicious sensation of weight. No queazy stirring in the pit of his belly for lack of gravity, no forced squinting because of muscular reorientation.

With a muttered curse he unwound himself from his covers and sat up. For a moment he rested his

head in his hands, thinking, only a nightmare, thank God, only a nightmare.

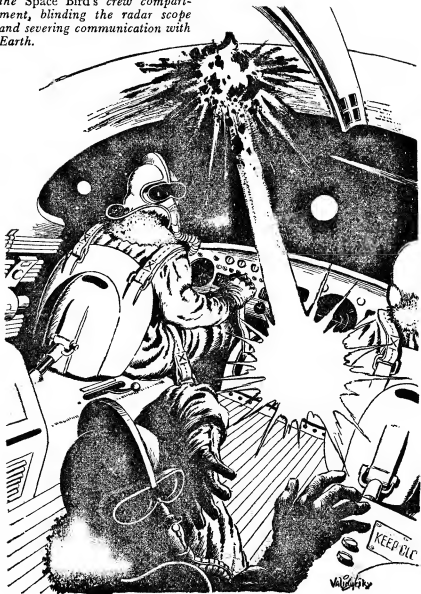
He lifted his head, and found cold sweat on his hands. Then sighing in relief he swung his feet over the edge of his bed.

A glance at the clock showed 10:45 p.m. Monday, June 10th, 2039. Heavily, he clumped across the room in the peculiar flat-footed gait of a spaceman accustomed to magnetic contact shoes. Cigarette in hand he sank into a heavy chair, touched a button on the arm, then sat back to watch the telescreen.

It was a rehash of the day's news. In nasal tones a senator was accusing the Republicrats of raising taxes. Then followed scenes from a spectacular fire. Suddenly, Bill's drooping eyelids popped open.

A commentator was saying, "... the two rockets of the Staker

The small meteor ripped through the Space Bird's crew compartment, blinding the radar scope and severing communication with Earth.



Space Mining Company, ready for a scouting trip to the asteroid Beta Quadrant."

A close-up of Tom Staker followed. Tall, rangy, with blond hair like straw in the wind. Bill laid his cigarette in a tray and with critical interest leaned forward to look at his brother.

"We figure to find uranium," Tom was saying, with a glance toward the vertical rockets, "all through the Beta Quadrant. Our departure is waiting on the return of my brother, Bill, from his Mars-to-Earth run."

A reporter asked Tom, "Private enterprise is unique in these days of virtual monopolies. What's the story behind it?"

"Well, our great-grandfather, George Staker, believed passionately in private enterprise," Tom began. "Somewhere around 1952 or 1953 he established a trust fund for his third generation descendants to finance any project they think worthwhile. And he got an ironclad guarantee from the government that the trust fund for private enterprise would be honored in the future. You see, my ancestor was quite a romanticist. In one of his books entitled 'The Philosophy of Science' he says 'People of this dawning Atomic Age little realize they are living in a vast dream. A dream that is slowly taking objective shape. A tool here, a part there, a plan on some drafting table. Men of ideas are pointing the way, structuring the inner dream world of a generation. Even today's science fiction literature contains important ideas for the dreams-become-reality of tomorrow.'" Tom finished up,

"With our Project Venture, Bill and I are going to bring a dream into reality—making a little on the side, of course!"

The commentator ended his interview with: "And so, we await with great interest the carrying out of George Staker's dream, a man whose Twentieth Century ideas of private enterprise have blown a breath of fresh air into an age of dull dreams and little imagination."

Bill Staker pressed the control button, darkening the screen. "Dream boy. Tom, you damned fool." He got up and scuffed into the bathroom to stare into the mirror. Twenty-five years old, and already lines were grooving both sides of his nostrils. Tousled black hair like brush hanging over a high bank, and ridged creases in his forehead. Little lumps of flesh bulging over the corners of his mouth from constant tension. The tension of outwitting space on each trip 'tween the planets. But worst of all was the look in his gray eyes. The look that never went away anymore. The look of a man who has spent too much time staring into the enigma of the Universe and—thinking.

"I'm scared—scared as hell!" he blurted at his reflection. "And if I don't get hold of myself, I'm through—washed up!"

Space was no place for a man with imagination—too much imagination. You stared into the empty blackness here, you stared into the inky blackness there, behind you the Earth a tiny pinpoint, the Earth that meant rock solid footing, the caress of wind and land

in all directions. But out there in the aching void you raced for Mars like a mouse scuttling across a lighted floor. Raced because of what you couldn't see, couldn't fathom. Yet, you knew *It* was out there, staring back inscrutably.

He rubbed the flat of his hand across his right cheek, sighing from emotional weariness. Then he scuffed back into the room. On the way he collected a bottle of bourbon, mixer and glass, and dropped into the big chair.

As he worked on the bottle, all the anxiety and apprehension in him faded. Once he stared at the bottom of his empty glass. Funny how a guy could panic all of a sudden. He remembered it clearly now. Riding into town yesterday from the rocket port, he started brooding over details of Project Venture. Suddenly, an overwhelming black tide of fear worse than he had ever experienced confronted him. Like a man on the verge of insanity he licked his dry lips, staring about him and feeling as if something strange and terrible were taking possession of his mind. And in the middle of his spell a cloud blacker than space itself started reaching for him. That was when he yelled to the startled bus driver to let him out at this hotel. Maybe he could get hold of himself here.

Now, his arms sprawled over the sides of the heavy chair, he drifted off into a snoring stupor.

IN THE morning he awoke to a splitting headache. Somehow it helped to hold his head between both hands and swear at it in a run-

ning mutter. Finally he roused himself to go to the bathroom for a cold shower. Afterward, donning his powder blue Captain's uniform, he went down to breakfast.

He dawdled over crisp bacon and eggs, glanced at morning editions, and all the while the ashes of last night's emotional holocaust drifted through him. Drifted in fitful vagrant thoughts. He should have said no that first day a year ago. The big law firm made a great to do over the old document from his ancestor. Unique, they said. The chance of a lifetime. And by the end of the first meeting Tom was all fired up. Mining atomic power metals in the asteroid belt would bring the biggest returns, he said. They would be the only ones allowed to compete with the Asteroid Mining Corporation monopoly. And now Tom was building up public excitement in the venture, as if it were a circus. The damned fool. Why had he let his brother talk him into—

Suddenly, his line of thought snapped, and he was acutely aware of staring eyes.

He looked to his left, then felt a warm flush technicolor his cheeks. "Christy!"

Her blond curls making a soft halo around her jauntily raked hat, the space hostess from his ship gave him a warm smile. She was adequately stacked, Bill reflected, but there was levelheaded firmness and resolution in her too. That was why she was hard to handle.

"Good morning, Bill."

He didn't like the accusing gleam in her eye but he was glad to see her.

"Sit down, Christy. Have some coffee." He held her hands a moment, then eased her into the opposite chair.

He tried disarming her with a show of great enthusiasm. But the way she settled herself into the seat, all the while regarding him with those clear penetrating blue eyes, told him she was going on no snipe hunt.

"When you kissed me goodbye at the port yesterday, Bill, you said you were going directly to the field to be with Tom." It wasn't a statement—it was an accusation.

With an elaborate show of casualness he shrugged his shoulders. "Well, I was fagged out from this last trip. Decided I'd do better getting a full night's rest by myself at a hotel."

The waiter brought her coffee, and she left it to cool. She folded her long tapering fingers on the table, and a delicate lift to her fine brows gave her an expression of sympathetic concern.

Her smile was regretful. "Rocket men don't drink, Bill. You know it too. Bad for muscular coordination."

He said in some surprise, "You mean it's that loud?"

"Uh-huh." Christy leaned forward. "What is it, Bill? You haven't been yourself for weeks. You looked haggard yesterday and when you left the ship you were almost running, as if trying to escape from something. And now this strange avoidance of Tom. He got hold of me this morning early, wanting to know where you were. And I guess it's pretty important that he sees you, Bill. Seems there's

been trouble at the field."

It was as if someone had prodded him in an agonizingly sore place and he reacted instinctively. He let his knife clatter on his plate, aware that he was dramatizing himself.

"When I'm ready for a woman's sticking her nose into my affairs, I'll send her a special invitation!"

Christy's delicate nostrils flared, and her bosom rose and fell rapidly. Then she seemed to get hold of herself. "I'm sorry if you got that impression, Bill. I was only trying to help you both."

Cherishing his irritation, Bill went on, "Seems to me you're bending over backward helping Tom, playing messenger, private eye—"

Christy broke in with a catch in her throat, "Oh, Bill, please! Let's not quarrel as soon as we get back."

Bill shoved his dishes aside, the tone of her voice reaching into him to dampen down the fires of anger. Then he managed a slow faint grin.

"Okay, Christy." He reached for the check, saying, "Well, if you can stand my company, would you like to come along out to the field?"

With her eyes glistening, she answered, "I'd love to."

THE PRIVATE rocket landing field of the Staker Space Mining Company was an hour's drive north of the city. Three miles from the field they made out the two gleaming snouts of the rockets pointing skyward. Then as they approached the edge of the field, Bill turned off toward a two story frame structure that served as office and warehouse.

Bill said, "Might as well check to see if Tom is in the office first."

At the door Bill poked his head in and shouted up the stairwell, "Hi—Tom?"

A chair scraped, and footsteps sounded across the upstairs floor. "Yeah—that you, Bill? C'mon up!"

They found Tom at a desk before a wide window view of the field. On the office walls hung big graphs of fuel consumption curves, trajectory plots from Earth to the asteroid belt, ballistics computations, oxygen consumption curves per unit metabolism per man.

Christy looking at the rockets, said, "Gee, Tom, they look beautiful. Like monsters straining their tethers."

Tom looked up at the girl's profile, and to Bill who was watching, he bore the look of a man savoring what he saw.

"Yes, they are. That first one's mine, the *Space Bird*. The other is Bill's, the *Space Dragon*."

Bill cast a professional eye over the charts and graphs on the wall, while far down in his subconscious a sharp twinge of jealousy flaminated, tangling with his fears of space in a hybrid monstrosity. Then like lava in a plugged volcano his obsession found a new outlet. The fear of space now came up disguised as hatred for Tom.

In an unusually calm voice Bill said, "Well, I see you have everything just about completed."

"Yeah," Tom glanced up with a significant look. "Someone else was interested in those charts and graphs too the other day. Someone who didn't bother to use the door."

"What d'you mean—somebody break in?"

Tom nodded. "Yep. Jimmied a

window downstairs. But I don't think they got anything, because the door to the office was still locked when the watchman surprised them. They got away in the dark."

Christy's eyes grew large and round. "Who do you suppose it was?"

Hitching his long body erect, Tom said with a gesture of his right hand, "Well, there's only one outfit interested in our destination—and that's Asteroid Mining."

"Good heavens," Christy said in great surprise. "You don't mean a big corporation like that would stoop so low?"

Tom smiled at her. "With a monopoly on power metals Asteroid has been gouging the world. People have become resigned to the situation. But if we can supply uranium ore cheaper there's going to be a clamor for private enterprise again. Under the present system private enterprise has been withering on the vine. This is our big chance and the public is pulling for us."

Bill's hold on his temper slipped another notch. "Yeah, I saw that interview with the television news you had. Saw it last night." He folded his arms across his chest. "If that's your conception of winning support for our venture then you better take up circus advertising."

For a moment Tom looked like a man who's taken a bucket of ice water in the face. Then his feet hit the floor. "Say, now, wait a minute, Bill!" he said, half in anger. "Who d'you think's been shouldering the big share of Project Venture—while you've hung on to your job and a pretty salary?"

"Didn't we agree you'd spend

full time on the Project while I acted as consultant between trips?" Bill shot back.

"Yeah, I quit a fair job as first officer on a freighter to handle it."

"And you are guaranteed fair wages and a fat slice of any profits we make," Bill snapped. "The thing I didn't like in that interview of yours was that starry-eyed eye-wash about our ancestor being a man of vision, a philosopher and a dreamer. That's a helluva tag to put on us—'The Dream Boys'! Good God!"

Tom stood up, facing his brother in icy silence. Finally he said, "Is that all you've got to offer—a lotta carping criticism?"

The planes of Bill's cheeks flattened under the downward pull at his mouth corners. The black ugly tide was running in him now and he could not stop its sweep. His fear of space, the frantic will to escape from it again, all the irritation and anger were deep currents and he was a mere piece of flotsam tossing on the advancing wave of the black tide.

He said, "No, damn you. I've got something else in my craw too. It's Christy. I've seen the way you look at her, and I know that whenever my back is turned you're doing your damndest to break us up!"

Tom's face turned gray and suddenly his eyes were wide open. Knots stood out on the points of his jaws.

In a strange half choked voice he said, "That's a blasted lie—and you know it. It's an excuse to cover up for your own peculiar behavior lately. I think—"

Christy broke in with. "Bill—

Tom, for heaven's sake stop it!" Her beseeching eyes were glancing sharply from one to the other in growing panic.

Bill stood lightly on his feet, his fingers curling and uncurling into balled fists.

Tom went on, a bleak look in his eyes. "I think you've been in a soft berth too long. The monopoly you work for has softened you, taken out the guts a man needs to stand on his own feet—"

Bill suddenly stiffened. His right shot out in a hard, sharp blow that crashed against Tom's chin. Tom grunted, a surprised look in his eyes, and sagged to the floor.

For a moment Bill stood over him, nostrils flaring, his whole body tense and waiting. But Tom was too groggy to get up.

"Oh, Bill, how could you!" Christy cried out, dropping to her knees beside Tom.

Bill strode with measured step to the door. There he turned, and looking back with a sneer, said, "Sweet dreams, Dream Boy!"

IN A luxurious office of Asteroid Mining Corporation on the twenty-third floor of a Manhattan skyscraper a furious official of the corporation faced an uncomfortable underling.

"I've heard of some pretty crude tricks in my time, Heilman, but breaking into the Staker Company's office like a common house thief takes the tin medal for low grade brains!" the official ranted, pounding his desk. "I suppose you thought that was an excellent way to advance yourself in the corpora-

tion eh? Finesse, Heilman, finesse. That's what it takes in matters like this. Asteroid Mining, before it got the monopoly, stopped competition, but not by common housebreaking—"

"But—but I thought," Heilman explained lamely, "that we could get a copy of their trajectory and then deal with them after they got out to the quadrant. You know, fire a 'meteor' at them, blanket them with radio jamming, ruin their radar sighting—"

The official snorted and leaned disgustedly back in his leather chair. "No, no you big dumb ox! You're retired from the team, benched. Now you can sit on the sidelines and watch how the first string fix Staker and Company."

When Bill asked for his key, the clerk handed him the key and a faintly lavender tinted envelope.

Mystified by the feminine handwriting, Bill sat in a lobby chair, and tore open the jasmine scented envelope.

The note was brief. It said, "Dear Captain Staker: Please call on me at your earliest convenience, Apt. 5B. It is a matter of utmost importance to both of us. Margo."

Ever since leaving Tom's office, Bill's mind had been spinning about a center of hatred and ugly rumination. But now the stimulus of the jasmine fragrance struck a spark of adventure on the edge of his churning mind. The tangential path led off into inviting mysterious shadows and he was going to follow.

The elevator stopped at the apartment floor of the hotel's north

Tower. In the softly lighted corridor his feet fell soundlessly on the deep pile rug. He turned a corner, then walked up a short flight of steps to the door of Apt. 5B.

In response to his knock the door was opened by a vision in white satin. She was startlingly beautiful. Dark heavy lashes, creamy skin, white even teeth in a flashing smile, a lithe body poised with the ease of a jungle cat. She was fulsome and high breasted, and as she followed Bill's quick appraising glance, she seemed to smile knowingly that all he saw was displayed to best advantage.

Hat in hand Bill said, "I'm—I'm Captain Staker."

With a throaty laugh that could have been carefully timed, she said, "And I'm Margo. Come right in Captain."

Bill walked onto a white rug, and unobtrusively took in the rich furniture Twenty First Century Modern, the warm brown of the logarithm ruled walls, paintings in the style of Van Gogh, sharply angled table lamps, the gold drapes at the windows.

"It was kind of you to come so promptly," Margo continued, settling into a chair.

Bill brought his glance back to her. "Well, frankly, I was curious to know what a perfect stranger could have in common with me."

She laughed indulgently. "Nasty of me, wasn't it?—taking advantage of a human weakness." She gestured at Scotch and bourbon on the coffee table. "I'll let you do us the honors, Captain. Bourbon for me."

Presently, glass in hand and a

spreading warmth in him, Bill fixed the girl with a quizzical look. "Tell me, Margo, just what is this matter of utmost importance to both of us?"

She put her glass on the table, then sat back and Bill felt the full impact of her dark lustrous eyes. "It's a business matter, Captain. You've been recommended as a man of high purpose and dependability. As the heir to my father's controlling interest in Intercontinental Lines I am badly in need of a man with your experience to handle traffic details."

Bill lifted a brow. "Intercontinental Lines? Never heard of it. Exclusively airline traffic on Earth?"

"It's a new company formed under monopoly regulations. Of course, I realize you're a spaceman, but staying on Earth would have its compensations. You can name your own salary."

Bill leaned forward and mixed another drink. This was something unexpected and pretty tempting too. No more fighting his fear of space. He downed the drink in a few gulps, then stood up.

"Well, I—I'd like to think things over," he said with hesitation, walking slowly to the window.

Margo followed, saying, "I don't mean to rush you, Bill—yet the situation needs your experienced hand."

"I know, but my brother and I are all set to make a scouting trip to Beta Quadrant."

Margo leaned against the window drapes, smiling with frank admiration. "I know you are. How in the world you can take off from

Earth and hit a target far out in space is beyond me. Is it something like firing artillery?"

The warm glow already suffusing Bill's senses took on added lustre when he looked into her questioning eyes. Expansively, he began drawing diagrams, and explaining the elements of space navigation.

"Now here's the trajectory my brother and I are planning to use," he went on, drawing a complex curve with loading figures and fuel consumption and point of contact with the Beta Quadrant.

When he paused once, Margo touched the gold sunburst emblem on his arm. "That's fascinating, Bill, but making a trip like yours is all a gamble. I'm not offering you a gamble. I'm offering you a sure thing."

"Yes, I realize that." Bill got to his feet. "But just the same I want to think your proposition over, Margo."

She leaned toward him putting her hands on his lapels. "Bill, don't risk your neck out there in space. I need you desperately in the company."

Suddenly, Bill was electrically aware of cool, smooth arms sliding up and around his neck and her soft red mouth within fragrance distance.

And he was exquisitely aware of the full soft length of her pressing against him. The scent of jasmine reached him with bewitching stealth. That was when he closed the gap to her mouth in a sudden rush.

Bill came out of a whirling state of pure feeling to hear the visiphone buzzing insistently.

"The phone," he mumbled.

Margo opened her eyes dreamily, then comprehended. She walked over to the phone, picked up the receiver.

After a moment she turned around looking at him questioning-ly. "It's for you, Bill."

He took the phone and said, "Captain Staker speaking."

The desk clerk said, "A gentleman to see you, sir. Shall I send him to Apt. 5B?"

"No," Bill answered. "I'll be down to my room in a few moments and see him there."

He turned to Margo. "I guess business comes before idyll, Margo. I've got to go."

Her lustrous dark eyes searched his face intently. "How long must I wait for an answer, Bill?"

"Can you wait until Thursday—three days?" Time enough to thresh things out with Tom.

"I guess I can," Margo said, touching him with an inviting glance, "but do I have to wait that long before I see you again?"

Bill grinned and shook his head in wonder. "My lord, what persistence! I got an idea any visiting would not be entirely social. Somewhere along the line business would rear its shaggy head. Okay, how about dinner at the Wedgewood Room tomorrow night?"

"Wonderful!"

Later at his own floor to his surprise he found Tom pacing the corridor. In a strained voice he said, "The clerk said a gentleman—"

Tom came back in a conciliatory tone, "And I don't fit the description, eh? Well, anyway, Bill, we got things to talk over. How about it?"

Bill shrugged noncommittally, unlocked his door and the two entered. Perched on the arm of a chair, Bill lighted a cigarette and pulled deeply of it.

"Well, what is it?" He glanced coolly at his brother sitting with his left leg dangling over the arm of his chair.

Tom cleared his throat and said, "I—er, came to see how we're stacking up, Bill. After all we got a big show on our hands and the whole world is waiting for the curtain to go up. But we can't be squabbling between ourselves when we go on stage. Let's settle matters now and get on with our job—after all we both got a lot at stake in the company."

Bill studied the end of his cigarette a long moment. "I guess you might as well count me out, Tom. I'm quitting the show."

Furrows appeared above Tom's brows. "Quitting! And after all you've put into the venture? Bill, have you gone nuts?" He stopped a moment. Then he said, "Oh, I guess I see the light. Christy, eh? Well, Bill, honest—and I really mean this—you can have all the profits of the trip if I'm guilty of trying to take Christy away from you. You've got the wrong slant on things."

Bill shrugged, saying, "It's not that—and I still am not convinced—it's just that I'm considering another proposition."

Tom got to his feet in agitation, looking down at Bill incredulously. "My God, Bill, you sure have changed! What about all those bull sessions we had reading and re-reading the George Staker philoso-

phy of free enterprise? The world needs an object lesson to show how far it has strayed from those first wonderful days of the Atomic Age. We are heirs, Bill by special franchise, Old George saw the shape of things to come pretty clearly, and it's up to us to carry out his vision of things as they should be."

Bill ground out his cigarette in a tray. His underlip crowded out stubbornly. "I'm not going."

For a moment Tom stared hard at Bill, and a heavy singing silence lay between them. Then Tom strode to the door and opened it. "All right, Bill—you and I are through!"

The door slammed. For awhile Bill sat looking at it, wondering why the slammed door reminded him of looking at his reflection in the bathroom mirror and telling himself "I'm scared—scared as hell. And if I don't get hold of myself, I'm through—washed up!"

THE NEXT day when he was busily dressing, the ultrafax popped out the breakfast edition.

"*Space Bird* takes off for Beta Quadrant. Tom Staker gambles all."

Bill stared at the pictures of the rocket climbing savagely at the head of a column of fire. The crazy, stubborn fool. Going it alone, risking his neck and everybody else's aboard. Well, let him go out there and break his blasted neck on the Asteroid Belt.

For the next three days Bill saw much of Margo. She was the most exciting thing he had ever discovered, and he indulged her laugh-

ingly when she took to speaking of his position in Intercontinental Lines as an accomplished fact.

On the third day he took Margo to lunch, a Margo with shining eyes, for this was Bill's day of decision. She had done her work well.

He ordered for them, and added, "Also a bottle of champagne."

The waiter brought the champagne first. There was no doubt on Margo's features what this was about, even though it had always been "if", "maybe" "possibly" in Bill's discussions with her about the new job.

In the midst of picking up his glass and proposing a toast, "Here's to my new—" Bill stopped. The ultrafax had popped out a sheet. Carefully putting the glass down, he said, "That's a special bulletin."

Picking it up he read aloud, "Staker Rocket in serious trouble. Home field reports damage by small meteor. Crew on emergency air bottles. Mysterious emanations blind radar scope and disrupt communication with Earth."

Toni—and the others, out there fighting for their lives against suffocation and intense cold. Their quarrel seemed like the antics of teenagers now. He had to get out to the field, see if he could help.

"What are you going to do?" Margo was watching him intently, the knuckles of her small hands white.

"I'm going to the field."

"But—but what about that toast you were making to your new—job, that's what you were going to say, wasn't it?" Her eyes were intense spots of jet.

"I guess that'll have to wait,

Margo," he told her. "I can't stand by when Tom needs help."

Margo clutched his hands convulsively. "Bill, don't take a rocket up or you'll die in the same trap he's dying in!" The words rushed out as if through a trapdoor she could not control.

Bill glanced at her with sharp, new interest. "How do you know it's a trap, and how do you know he's going to die?"

Tears began to well up in her large eyes. "All I can tell you is don't go out there, Bill. I don't want to lose you—now."

Dawning realization filled Bill with horror. "Margo—Margo, for God's sake, what kind of a game have you been playing with me!"

Margo's shoulders sagged, and she began to sob out her story. "Bill, please, please believe me. I love you. That was not my part of the agreement with Asteroid Mining—to fall in love with you. Yes, I was hired to separate you and your brother, break up your company."

Before Bill could snarl an answer to that, a hotel service clerk came with a portable phone.

"Call for you, sir."

With his eyes fixed steadily on Margo, he spoke into the transmitter, "Captain Staker."

Christy's strained and tearful voice came over the wire. "Bill, oh, Bill, we're getting terrible news here at the field. Tom's ship is losing oxygen!"

"Yes, I know," he answered. "I just got the Ultra on it. I'll be right out, Christy."

As he replaced the phone he looked at Margo with a grim, loathing expression. "A female trick as

old as the universe and I had to fall for it. You and your innocent questions about our Quadrant trajectory! What a sucker I was!" He drew back his hand to slap her but decided against it. She was crying when he left.

On the way to the field the familiar but forgotten black tide of fear rose up like a spectre once more to scatter his gathering ideas for helping Tom. Resigning himself to its power and pulling over to the roadside, he sat still, gripping the wheel. Yes, he told himself tensely, here I sit while Tom and the others drift in space needing help. The realization of their need slowly gave him a greater objective clarity than he had ever had before. He began to see himself now for what he was—a cringing weakling stripped naked of all manliness at the first show of evil. Though he perhaps had been worse than the average, this was the trouble with his whole security minded generation. They never dreamed great dreams like George Staker and his era which wrested atomic power from the treasure house of nature. No, this generation carefully followed safe, charted paths in the world of ideas. It had given up its freedom to a world of government controlled monopolies. And Tom, taking up the torch left by their creatively imaginative ancestor, was trying to recapture a small facet of that golden age.

WITH THE dawning in him of Mid-Twentieth Century mind, Bill felt a thrilling sense of freedom as the black tide receded over the

horizon of his inner world. He took a new firm grip on the wheel, and took off again at high speed.

Christy was at the field office waiting outside. As he stepped out of the car, she threw her arms around him.

"Oh, Bill, what can you do for Tom now?"

He said gently, "I'll bring him back for you."

She drew back her head to look at him incredulously, "You still think—! Oh, Bill, you foolish guy, you're the one I love, the one I've always loved."

For a moment he searched her eyes and saw only a revelation of honest feeling. A surging gladness flooded through him, releasing an unconscious hard ball of tension inside.

"Christy, what a knothed I've been!" He gathered her up to kiss her fervently. "So long, Christy. Old Staker was a piker at dreaming compared to what I'm dreaming for you and me!"

The field men had the rocket fueled up and provisioned to go. "This'll be no picnic, but there's a prize out there if we want it bad enough. You'll all have a share in it, instead of handing it all over to the government. Are you with Tom and me?"

"Sure, Bill. Let's go!"

"Yeah, let's open 'er wide up!"

They all clambered up the ship's access ladder in high spirits. In a moment a warning red signal rocket shot into the sky and burst, warning all local aircraft. Another five minutes and the rocket leapt off the Earth with a long, shattering roar.

Bill kept the fissioning metals

pouring through the atomic explosive after-chambers until the men screamed at the acceleration. Finally he eased it off to free flight and the *Space Dragon* followed the trajectory of the *Space Bird*.

All the way he hovered over the radar scope. Then after long hours of fatiguing watching he crawled into his bunk.

Later he woke up to Radarman Jones' voice in his ear.

"Captain—wake up. We've picked up a ship on the scope!"

Bill piled out and forced his floating feet to magnetic contact with the steel deck. He followed Jones down the short corridor to the communications cabin.

At the radar scope Bill studied the ship, then gave orders decelerating the *Space Dragon*.

"There's another ship!" Jones exclaimed, pointing at the edge of the scope.

Bill peered at the new ship, studying its characteristics. Then he nodded his head. "It's the *Space Bird* all right. But that first one—I got an idea it must be an Asteroid Mining ship. Margo must have transmitted the *Space Bird* trajectory to Asteroid Mining. I don't see how anybody would know where to find us in such immense distances as Beta Quadrant."

Stepping over to the communications panel he called the *Space Bird*. No answer, and though he kept calling he could not raise the ship.

Then he called Staker Field on Earth.

"Caxton?"

The field came back. "Staker Field. Go ahead."

"Caxton, we've found the *Space Bird* but can't speak them, so I'm cutting you in on communications with an Asteroid Mining ship that's hanging around. Tape pictures and sound—the whole works."

"Okay."

Flipping another switch, Bill called the strange ship on the all-interplanetary frequency.

Suddenly after long minutes of silence the dark screen lighted up with the impassive features of a round faced, cold eyed man.

"Yeah? This is the *Pluton*. What d'you want—and who are you?"

"This is the *Space Dragon*—sister ship to the *Space Bird* there in your vicinity. What's the matter with our ship?"

The man's eyes darkened and his jaws tightened. "There's plenty wrong with it, *Space Dragon*. And the same thing's going to be wrong with your ship, too. A 'meteor' is going to hit your ship the same as hit the *Space Bird*. Asteroid Mining doesn't like competitors horning in their business!"

Bill shot back grimly, "I'm glad to hear your views on competition, Mister. The whole world is interested in our Project Venture, and when they hear what you said there's going to be hell to pay. Because, you see, everything you say and how you look saying it is being recorded back at Staker Field on Earth!"

The other man's impassive face suddenly turned into a ludicrous mask of a man burning his fingers on hot chestnuts. The two way hook-up abruptly ended. On the scope Bill and Jones watched the image of the *Pluton* begin to move across the scope and finally out of range in the opposite direction toward Asteroid Mining's Omega Quadrant.

Hours later the *Space Dragon* made physical contact with Tom's ship. Bill was the first one through the communicating airlock.

Tom, his face drawn and haggard, met him as he emerged in the ship. The rest of the crew were lying still to conserve air.

"Hi, Bill. Boy, are we glad to see you. That 'meteor' they threw at us confined us on air bottles in the forward compartments."

Bill shook his hand warmly. "We got enough air for all of us. After we patch things up here, let's start carving us a chunk of private enterprise."

Tom's tired eyes lighted up. "Hm, say, you're so right! Our geigers have found enough floating ore in Beta Quadrant already to make a big nick in Asteroid's business."

Bill gave him a mock salute, "Okay, skipper. You've earned the title of Head Dreamer, and I'll help make your dreams come true!"

SALESMAN'S GUIDE, RULE 2: *The modern 1995 customer who enters Tracy's Department Store is not always right, but as far as you are concerned, he is.*

THE SALESMAN

By Waldo T. Boyd

THE LITTLE green cue light blinked three times. Trevor Anson arranged his tie at just the nattily precise angle, waved his hand before a hidden lighting-effect switch in the smooth marble pillar at the entrance to the display room, and faced the elevator. This would be a "green light" customer—a first-time prospect, and three blinks indicated a very difficult individual. Anson quickly practiced his most beguiling smile.

"Welcome to Tracy's Roboid Department," he said, enthusiastically, as the elevator doors slid open. His practiced smile was just right.

He quickly noted the man's conservative dress, the flaming red tie. Aggressive type, Anson decided. A shock of red hair that didn't want to lie down hinted that he was stubborn as well.

"Heard you've got a sale on robots," Red-tie said, challengingly,

as he stepped aside for his wife.

The woman who stepped off the elevator smiled, showing a lovely dimple, and Anson beamed on her. The tiny flake of a hat perched atop her auburn hair reminded Anson of the comb on a Rhode Island Red.

"Not robots, sir," Anson corrected diplomatically. "The Plasti-Cast Roboid is not exactly a robot."

"Well, anyhow, trot one out, and let's see what it looks like. Millicent will never be satisfied until she's seen one of the things." He glared dramatically in the general direction of his wife, who pretended not to notice.

Anson led them into the Gray Room. He mentally went over the applicable rule: *Rule 23; Always introduce the marked-down merchandise first. It may provide the customer with an incentive for buying something better.*

"These are last year's models," he

said, with just the right flavor of distaste in his voice. "Of course, you may expect a slight reduction . . . a small percentage . . ."

Red-tie was muttering. "Damned mechanical things, full of wheels and wires. What's to keep 'em from running amok and killing us all!"

"But dear, they don't have wheels anymore," protested the woman, timidly. Her face was pretty, Anson decided, but it was obvious that the man would be the deciding factor in this sale.

He made a mental note: *Rule 31: Pick the individual of a family group who seems to hold the deciding voice, and SELL!* He remembered a portion of a sales talk he had memorized a few days before, and took it up, almost chanting:

" . . . our Roboids are grown, much as crystals are grown, in great vats in New Chicago. A Plasti-Cast Roboid is guaranteed . . ."

"A fat chance we'd have of collecting the guarantee if we were chopped into mincemeat," Red-tie interrupted, shuddering slightly as the implication of his own words hit him.

Anson felt a moment of panic as he failed to remember an applicable rule from the Salesman's Guide, but it formed in his mind at the last moment: *Rule 18: Never argue with a customer—change the subject.*

"Why don't you come with me to the Green Room?" he asked. "The very latest models are on display." He walked slowly at first, then more quickly as the couple allowed themselves to be led. He slid his hand near a hidden switch in the archway, and floodlights came

on just as they entered.

The woman uttered a little squeal of delight at the sight of a very handsome figure dressed in a cutaway, standing in an attitude of service.

"Oh!" she breathed dreamily. "He would make such a wonderful bulter."

"Well, wind him up and let's see what he'll do," growled the man, his face florid in the colored light of the Green Room.

"I'm so very sorry," Anson said, slightly flustered, remembering that this was always the crucial moment in a sale. "The Roboid cannot be activated for demonstration purposes."

"What?" roared Red-tie, incredulously. "Do you mean to say you want me to buy the damned thing without knowing whether it ticks or not?"

Anson tried desperately to remember the best rule for such an answer, but failed. He plunged desperately into his own explanation.

"You see, our Roboids are matched to your family personality at the time of purchase, and activated then. We cannot erase a personality once it has been transferred to their sensitive minds." He saw the disbelieving smirk on the man's mouth and felt that the sale was indeed lost. But he plunged on, desperately.

"They're very economical. They don't require any upkeep, like food. When they become tired they will sit or lie down near an electric outlet and plug in a power cord, and in a few minutes they are as rested and tireless as . . ."

"Bosh!" Red-tie retorted. "I've heard enough. Come, Millicent, we still have time to try Bonn's new Helio-rotor. At least they'll give us a demonstration."

Anson escorted them to the Magna-lift. He felt better as he recalled the last rule in the Guide, the one that seemed to cover the situation so well: *Rule 50: If they balk because of the no-demonstration rule, let them go. They will be back when they have seen one of their friends with a Plasti-Cast Roboid.*

"Good-bye, Sir; Madam," Anson said wearily, as the Magna-lift doors closed. "Come again soon."

He breathed a sigh of relief as the elevator cage dropped them from sight. A salesman, who had

been standing by, spoke to Anson. "People are *such* dears at times, aren't they?" he said. "However, it's time for your rest period. I'll take over now."

"Thank you so much," Anson replied tiredly.

He walked to a tiny room at the far end of the great showroom and closed the door. He stretched wearily out on a low, folding cot, the only piece of furniture, and reached for a tiny black power cord hanging nearby.

Defly he plugged it into the socket under his armpit, and breathed deeply, relaxedly.

"Yes," he chanted softly, drifting off to sleep, "people *are* such dears sometimes."

— THE END —

STATEMENT OF THE OWNERSHIP, MANAGEMENT, AND CIRCULATION REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (39 U. S. C. 233)

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James L. Quinn, *Editor*.

Sworn to and subscribed before me this 18th day of September, 1952.

(SEAL)

Evelyn Dorothy Hubbard (My commission expires March 1953)



The Sea Between the Planets

UNTIL ROCKETS are put into space, no one will be able to tell about the condition of weightlessness, the absence of gravity, the state of "free fall" that can be experienced. We know that anti-gravity devices seem improbable. Yet it is extremely desirable to know how a human being feels and behaves in free fall, in a state of null-gravity. Scientists have been beating their heads against a solid wall endeavoring to think up some way, no matter how inadequate, of simulating this situation.

Parachute jumpers offer one possibility. In a sense, when they are falling freely, before their parachutes open, they are in the equivalent situation of a rocket man floating free in his space suit. Unfortunately they can't fall for a very long time without having to open their chutes. In addition, even during the moments of so-called free fall, they are too conscious of the high-speed air-stream flowing around them. Shock, wind, cold—all such conditions—lessen the sensation of true free fall.

The idea of a freely falling elevator also simulates gravity-less-ness. But here too the duration of un-

hindered fall is slight. Even if an artificial elevator structure of great height were constructed, the period of being in free fall would be short, because in a short time the snubbers and shock absorbers would have to take hold and ease the freely falling elevator to rest. There is a strong possibility, however, that such a structure might be built in the not very distant future, for it would enable space surgeons and medical men interested in human reactions to space flight to get some accurate observed data on biological behavior under no gravity. In fact, this will probably be done soon, for medical men are clamoring for data which they just can't get in any other way.

The free-floating of a rubber-suited swimmer whose bouyancy in water is just one, is a rough simulation, in a sense, of weightlessness and free fall, although here the presence of the water medium is highly deceptive. At least the tremendous freedom of motion with the consequent loss of sense of direction helps a lot in giving the feeling of free fall. The sea between the planets is of a far more tenuous stuff than water!

The free-fall elevator mentioned above is about the one chance we on Earth will have of experiencing free fall. Constructed vertically along the side of a cliff or high mountain, say, only as high as ten thousand feet—by no means an impossible engineering feat—an elevator system would provide a considerable amount of information on how the human body reacts to weightlessness, at least for periods of a few minutes. The falling eleva-

tor, stream-lined and projectile-shaped, could avoid acquiring the conventional terminal velocity for quite a while, and thus duplicate considerably the conditions within a space ship in free space without acceleration. As soon as the plans for actual manned rockets come a little closer to reality, we are likely to see and hear a lot of organizations trumpeting for one of these space duplicators. The technicians and medical men will have a hard time trying to prevent people from sneaking a ride one way or another. Come to think of it, if an amusement park were to install such an elevator, it might do a hearty business!

Skyrocket 558-II . . .

A NAVY research plane—rocket is the better word—catapulted across the sky at the incredible speed of thirteen hundred miles an hour! This recently released news shows that we are finally beginning to produce sound original research in rocket engines instead of being content merely to copy and modify German rockets. The behavior and use of the new experimental craft compares with the plane-intercepting rockets the Germans were using in the last days of World War II.

The Skyrocket is a small plane, with the barest traces of swept-back wings; it is powered solely by rockets and was launched from the belly of a B-29 at thirty thousand feet. From this altitude it climbed almost vertically to eighty thousand feet and then zoomed in a series of maneuvers designed to test its strength. It came through with fly-

ing colors, and despite a flight-duration measured in minutes—about four for this plane—it showed great promise as the ultimate interceptor type.

When the fuel was exhausted the pilot glided to a safe landing and reported on the behavior of the rocket. He reported that the rocket shot through the "sonic" barrier without any of the yawing, vibration or other faults which have characterized that operation with jets. His personal reactions to the flying qualities of the rocket were slight, since he was basically operating from instruments and, to all intents and purposes, flying blind.

This single flight is not in itself extraordinarily spectacular, but it is indicative of what is in the cards. If such information has been released it is safe to assume that considerably more progressive work has already been done on other straight rocket craft.

It is interesting to consider that all that holds rocketry back is the matter of fuel—nothing else. In a way, it is as though we knew all about airplanes and their flight but didn't have powerful enough engines. That is exactly the position of rocketry. Chemical fuels, no matter how they are concocted, still haven't the "oomph" to take rockets where they are able to go. We won't see really startling advances in rocket flight until one of two things happens: either some government will decide to build a chemical step-rocket to go to the Moon, and hang the expense, or some geniuses will tie atomic energy to rocket engines. Until then rockets are doomed to be chained by gravity to the relatively

thin shell of Terran air.

Greatly encouraging is the fact that the military are growing concerned with the uses to which rockets may be put. Maybe they can persuade Uncle Sam to finance Lunar flight!

Transistor in Transition . . .

THIS IS a report on one of those "ramis in the framus" gadgets which, in the course of time, is going to change the lives of all of us—and which, because of its unspectacular, technical nature, will rarely be appreciated by any but the technician. Yet every thinking person should be acquainted with it. It is the gadget which is inheriting the mantle of the Twentieth Century's most important invention, the vacuum tube.

The gadget is called a "transistor" and was invented in the Bell Telephone Labs only a few years ago. Since then every laboratory on Earth has been working madly on it, and now it is ready to be applied on a wide scale. The transistor is nothing but a substitute for a vacuum tube—"only it don't got no vacuum!"

Physically the transistor is a sliver of germanium metal, sealed within a capsule scarcely as large as a sixth of a cigarette and with three or four

tiny "cat's whisker" wires touching it. That's all there is to it. It has no filament or grid or plate like an ordinary radio tube. It requires no power input except a simple plate voltage. It gives off hardly any heat. It is insensible to shock and violence. It is small. It is not made of delicate glass. It is rugged. It is cheap. And its virtues could be recited *ad infinitum*.

What does it do?

It does everything ordinary radio tubes do! You take it from there, compiling, if you can, a small list of the things modern vacuum tubes do. You'll have a fabulous list!

Electronics has burst on the world with miracles, but generally these have been dampened somewhat by the need for using tender tubes. The transistor overcomes this obstacle and wherever a vacuum tube control can be substituted for human muscles or human mind, the new industrial transistor, a mere three years out of the development stage, can take over the job. If you think we live in an electronics age now, watch the next decade and note particularly that the vacuum tube will be limited to power applications. The transistor, simple to build, harder to understand in terms of its operation (its theory involves "holes in space") is coming. . . .

Coming in the May issue: The author of that famous work, *The Exploration of Space*, brings to IF readers an exciting new yarn about a civilization that existed in space millions of years ago. Don't miss—

JUPITER FIVE by Arthur C. Clarke

MARGIN OF ERROR

(Continued from page 41)

mass and location has *least* effect on all solar systems outside its own."

The young Lobian, obviously jubilant at having so far managed to be correct, studied his computations, adjusted several dials below the scanning screen and brought a single solar system into view. Twisting other dials, he brought the image nearer and nearer until only the sun could be seen on the small screen. Then he made a careful final adjustment, touched a switch, and one by one the planets of the solar system singly popped into view. With an apparatus resembling a four-dimensional slide rule, Junior made rapid calculations as each of the nine appeared.

Then he laid aside the apparatus and watched the parade of planets begin to move by a second time. Halfway through he touched a button, stopping one planet on the screen. This he pointed at hopefully.

It was the planet known on Earth as Mars.

Horace shook his head with a kind of triumphant sadness. "You see?" he telegraphed George. "He has the right solar system, but the wrong planet, though the one he indicated *does* have the least effect on all solar systems outside its own."

George looked puzzled. "I don't quite follow that myself."

"I specified *provable* planet. The one Junior picked is too small for a practical experiment with the equipment we have available." The

teacher glanced at George. "It is only natural you would miss that point, for of course you don't know our school equipment. But only yesterday its limitations were explained to Junior. You see how forgetting to include *all* the data in his calculations causes your son to err?"

George nodded reluctantly. His antennae blushing a fiery red, Junior again fiddled with dials and brought the planet we call Earth into view.

"There!" he telegraphed.

Horace radioed his approval, an affirmative grunt. George beamed his pride.

A door in back of Marshall Igor Matoshek opened and his watching and listening audience saw the tall, soldierly figure of General Serge Marik appear on the screen. Silently the aide-de-camp handed a slip of paper to the most important man in all the world.

The Marshall adjusted his spectacles, frowned at the note and a flush of anger mounted to his cheeks. He waved the general away.

"Comrades," he announced. "I have just received the answer the President of the Tri-federation of North America has made to our reasonable offer of peaceful terms. I will not bore you with the full context, but it amounts to a categorical refusal."

"You will wait for my signal, of course," Horace radioed Junior. "When your adjustments are com-

plete, please transmit them to me clearly."

"Yes Sir," Junior sent back. "Azimuth two-hundred seventeen mils, five-hundred and two micromils. Elevation minus eight mils, thirty-six micromils."

"It is necessary to check students' data very carefully," Horace explained to George. "If by error we destroyed the entire solar system, it might throw us off our orbit sufficiently to cause mild weather changes. Conceivably it could even cause slight Lobequakes. The elimination of the single planet's mass will have only slight effect on its own solar system, however. Not enough to seriously incommode any

life there may be on the other planets. And of course it will have no effect whatever on solar systems other than its own."

"Comrades and citizens of the world," Marshall Igor Matoshek said, "you are about to witness an event beside which all other events of the past pale to insignificance." He raised one arm and spoke in a thunderous voice. "Fire!"

"Fire," Horace transmitted absently, and as Junior touched the proper button, turned apologetically to George. "I am afraid you don't find this very interesting. After all, it's pretty elementary stuff."

THE END

THE VICTOR

(Continued from page 54)

resurrect 5274. But they'd gain nothing. There would still be an extra plate. You see?

"So they destroyed the plate. He knew they would. And they also had to go back through the records, to Earth, through the security files there, through the birth records, everything. And they destroyed every trace, every shred of evidence that No. 5274 ever existed."

So he kept the memory alive and that kept 4901 alive while the other prisoners become automatons, hearing, feeling, sensing nothing except the bells. Remembering nothing, anticipating nothing.

But 4901 could remember some-

thing magnificent, and so he could anticipate, and that was hope, and faith. He found that no one really believed him but he kept on telling it anyway, the story of the Plan.

"Maybe this number didn't exist," someone would say. "If there's no record anywhere—"

4901 would smile. "In my head, there's where the record is. I know. I remember."

And so it was that 4901 was the only one who still remembered and who could still smile when sometime after that—no one in the prison colony knew how long—the Underground was victorious, and the Managerial System crumbled.

THE END

THE *Postman* COMETH

OF PROGRESS AND DECLINE

Dear Mr. Quinn:

I wish to take issue with the opinions expressed by "pwf" on pages 2 and 3 of your November issue.

"You understand the law . . . or you . . . stop eating," pwf says. But he evidently does not understand the law. He proves this by a comparison of historical technological progress with the stock market. He must be aware that an analogy is good only if the points of resemblance are demonstrated so rigorously that some other form of argument would usually be less involved and require no additional reasoning. In other words, the chief use of an analogy is to impress the unthinking. Mr. pwf, by depending entirely on analogy without any demonstration, shows he realizes the weakness of his argument.

The reasons for rises and falls in the stock market are fairly simple and obvious, and can be expressed as an almost entirely uncomplicated feedback equation. Can pwf do the same for the causes of technological

progress? Until he can, where is his analogy. (The equation mentioned above shows the conditions of a collapse, but it is extremely difficult to determine by observation whether these conditions are present. Hence the early wolf-crying mentioned by pwf.)

Rise and fall is *not* the pattern of every action known. Until pwf can show that technological progress has the characteristics of actions showing this pattern rather than of those showing other patterns, his argument must remain suspect.

I have concentrated on technological progress because this seems to have been all taken in by pwf's very narrow view. Actually, I think the prospect of decline in other fields much more likely. We may well be heading for a period of superscientific moronism.

You can see from this I am not being merely Pollyanna-ish. I think the prospects of decline excellent and frightening, and would appreciate seeing some real debate on this question, provided that it is conducted on a somewhat more concrete level than was done in Mr. pwf's undoubtedly well-written article. Some attention must be paid to facts, such as now existing trends in all fields, the cycles of past civilizations, and the level to which knowledge and dispersion thereof must reach before becoming no longer totally destructible; less to ghostly and unreliable analogies.

—Michael Wigodsky
Houston, Texas

We think pwf was writing of generalities and the over-all cycles of

human progress and decline rather than attempting to make a specific analogy of humanity, reduced to a common denominator, and its foreshadowed doom. However, there can be interesting debate—and we'd like to hear from someone who wishes to take it up with Mr. Wigodsky.

"BEST IN THE U.S."

Dear Editor:

The November issue of IF was excellent, in my opinion. I congratulate you on the pictures on the inside back and front covers. It looks so much better than when it was plain. When I pick up an IF mag I read it from cover to cover. I just finished the November issue and I find I like "The Image and the Likeness" best . . . Please remember to run lots of short stories . . .

One complaint—Why didn't the cover have anything to do with the rest of the book?

You put out a good mag . . . It is the best science fiction magazine in the United States.

Keep up the good work.

—Richard F. Allen
Framingham, Mass.

That's a mighty fine compliment. We thank you! . . . Now, about the covers on IF: beginning with the November issue, our policy is to vary our covers. Some will be symbolical (November issue) some will illustrate a story, some will suggest a theme—whichever offers the strongest approach to originality and effectiveness.

"SCIENCE FICTION BELONGS TO YOUTH"

Dear Mr. Quinn:

A letter in "The Postman Cometh" (November issue) literally drove me to compose my first "letter to the editor".

This letter represents, in my opinion, the height of bigotry and intolerance! The writer is "chagrined" to find that fanzine reviews are requested. His "worst fears are realized". He is "nauseated" at letters using "slangy drive".

The presumptuousness of such readers is astonishing. They are, in effect, demanding that a mass circulation magazine be tailored to their personal specifications without regard to the interests of others.

The fact that I enjoy fanzines is beside the point. I do *not* like your Science Briefs section, but I would not dream of suggesting that your other readers be deprived of the enjoyment and instruction they find therein.

I have no sympathy for "nausea" caused by letters using "infantilisms" such as "terrif", "groovy", etc. Or even "egad", "gazooks", or "goshwowoboyoboyoboy"! The average adolescent science fiction reader is, as a rule, considerably advanced intellectually beyond his age level. The fact that they express their enthusiasm and opinions in the patois of their contemporaries should not deprive them of the right to self-expression that you offer *all* buyers and readers of your magazine. Science fiction belongs to youth—let them speak!

—P. H. Economou
Miami, Florida



ON TARGET—Foreign craft is located several thousand miles from base, approximately 1000 miles above surface of the Moon. Televised image reveals it to be hostile. Bose Command switches to automatic pilot control and both missiles converge on target for crash dive. Pursuit is similar to principle of dog hunting rabbit, only instead of following a scent, missiles follow a metallic surface and image of the craft. Two missiles insure complete destruction. (Drawings by Ed Valigursky.)

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